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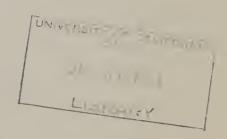


THE RESOURCES AGENCY OF CALIFORNIA epartment of Water Resources

BULLETIN No. 124

# WATER USE BY MANUFACTURING INDUSTRIES IN CALIFORNIA 1957-1959

**APRIL** 1964



HUGO FISHER

Administrator
The Resources Agency of California

EDMUND G. BROWN
Governor
State of California

WILLIAM E. WARNE

Director

Department of Water Resources







# State of California THE RESOURCES AGENCY OF CALIFORNIA Department of Water Resources

BULLETIN No. 124

# WATER USE BY MANUFACTURING INDUSTRIES IN CALIFORNIA 1957-1959

**APRIL 1964** 



#### TABLE OF CONTENTS

	Page
Letter of Transmittal	x
Acknowledgment	xi
Organization, Department of Water Resources	xii
Organization, California Water Commission	xiii
Authorization	xiv
CHAPTER I. INTRODUCTION AND CONCLUSIONS	1
Objectives	5
Scope of Report	6
Summary and Conclusions	9
CHAPTER II. METHODS AND PROCEDURES	11
Survey Response	12
Procedure for Determining Unit Use Values	12
Procedure for Estimating Total Water Use	13
Method of Classification and Definitions	14
Standard Industrial Classification	14
Manufacturing	15
Miscellaneous Definitions	17
Establishments	17
Employee	17
Working Day	17
Man Days	17
Brackish Water	17
Water-Using Plant Area	17
Urban Water Use	17

#### TABLE OF CONTENTS (continued)

										Page
	CHAPTER	III.	ANALYSIS	OF	THE	DATA	•	 •	•	19
Discussion	of Result	s								19

#### TABLES

		Domo
Table	<u>No.</u>	Page
1	Range of Average Annual Water Use Within Industry Groups	45
2	Average Annual Water Intake by Industry Group	52
3	Average Annual Water Intake by County	58
4	Average Annual Water Use by Industry Group	61
5	Weighted Average Annual Unit Values of Fresh Water Use by Industry Group	66
6	Estimated Annual Total Fresh Water Use by County and Major Industry Groups	73
7	Estimated Annual Total Fresh Water Use by Industry Group	108
8	Water Use of Major Industry Groups in Principal Water Using Counties	115
	PLATES	
	Plates are bound at the end of the report.	
Plate	No.	
I	Water Use by Manufacturing Industries in Califor	nia
I:	Principal Manufacturing Centers in California	
	APPENDIX	
Append	dix No.	
A	Data Analysis Procedures, Characteristics, and Limitations	117
В	. Survey Forms	129
C	Ribliography	135

#### **PHOTOGRAPHS**

<u>Pag</u>	<u>;e</u>
Exhaust Steam From Boilers Frontispiece	
Water Use in Industry	
Cooling Water for Reuse	3
Cooling Sinter in Steel Mill	3
Washing Aggregate	3
Washing Sawmill Equipment	4
Cooling Refrigerant	4
Brine and Lye Treatments in Processing	
Olives	4
Transporting Sugar Beets	7
Washing Beef Carcass	7
Washing Sugar Beets	7
Storage Supply for Washing Aggregate	7
Landscaping and Fire Protection	8
Washing Beef Parts	8
Removing Fine Sediments From Aggregate	8
Sprinkling Logs	8
Cooling of Products Derived From Coke	3
Processing Olives in Brine Vats	3
Water Undergoing Treatment Prior to Recirculation	4
Cooling Bed in Steel Plate Mill	9
Mill Ponds For Floating Logs	0

#### PHOTOGRAPHS (continued)

	Page
High Water Using Manufacturers	
Lumber Mill	32
Production of Steel	39
Oil Refining and Chemical Companies	40
Low Water Using Manufacturers	
Industrial Parks	37
New Uses For Water in Industry	
Cooling of Launching Pad During Rocket	
Firing	42
Removing Bark From Logs	42
Sprinkling Logs to Preserve Quality	42

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### THE RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF WATER RESOURCES

1120 N STREET, SACRAMENTO

January 14, 1964

Honorable Edmund G. Brown, Governor and Members of the Legislature of the State of California State Capitol Sacramento, California

Gentlemen:

I have the honor to transmit herewith Bulletin No. 124, "Water Use by Manufacturing Industries in California, 1957-1959." Because of the relative significance of the water needs of the manufacturing industry to the total urban water requirement and to the economy of the State, it is important to know present and future water needs for this ever-expanding economy.

This bulletin discusses the results of a survey of the State's 27,000 manufacturing establishments, describes procedures for determining unit values of water use based upon employee working day and water using plant areas, and presents estimates of the total water use by various manufacturing industry groups within each county and for the entire State.

The data set forth in this bulletin provide a basis for future planning of water resource development to allow for the continual development of industry in California.

Sincerely yours,

Director

William & Warne

#### ACKNOWLEDGEMENT

The Department of Water Resources wishes to express its sincere appreciation to the manufacturing industry of California for its generous donation of time and effort to provide the data contained within this report.

A special acknowledgment is extended to the Western
Oil and Gas Association and the California Manufacturers Association
for their cooperation and assistance in encouraging their
membership to contribute so liberally.

We are likewise grateful to numerous water service agencies for supplying water meter records of individual industrial accounts as requested by those industries.

## STATE OF CALIFORNIA THE RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF WATER RESOURCES

EDMUND G. BROWN, Governor
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WILLIAM M. CARAH Executive Secretary

#### Authorization

A study of manufacturing water use throughout the State of California was initiated in September of 1959 as part of the Unit Water Use Studies set forth in Senate Bill No. 434. This measure, codified under Section 226(e) of the State Water Code, authorizes the department to conduct investigations of the rate of use of water for various purposes.

#### CHAPTER I. INTRODUCTION AND CONCLUSIONS

Urban fresh water use in California is presently estimated to be nearly 3 million acre-feet annually, or about 12 percent of the State's total fresh water requirements. This relationship has changed from approximately 10 percent in 1950, and is continuing to increase. The water needs of manufacturing industries have increased and expanded at a rate commensurate with or exceeding the rate of general population growth. Because of the relative significance of the water needs of the manufacturing industries to the total urban water requirements and to the economy of the State, it is important that the water needs for industry be known. This relates not only to the present requirements, but also to future needs for an ever-expanding economy.

Increasing industrial demands are being placed upon developed water supplies. These supplies have already been overtaxed and seriously depleted in many areas of the State. If industrial expansion is to continue, steps must be taken to replenish, protect, and supplement diminishing supplies and to provide for increased water requirements in succeeding years.

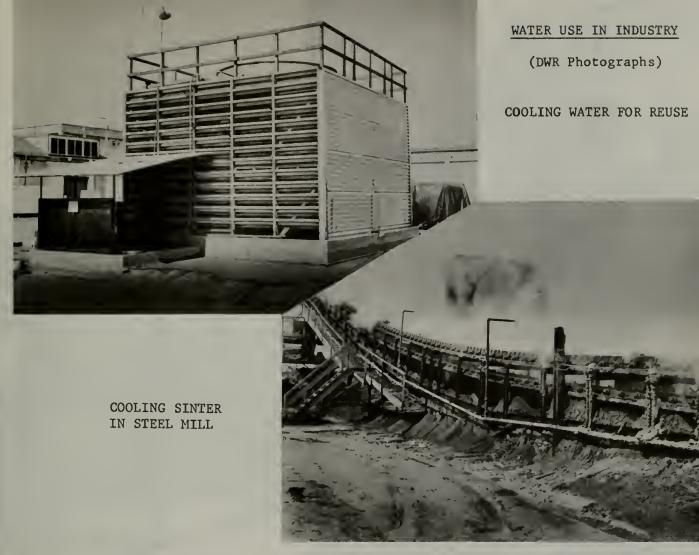
Industry, in recent years, has adopted practices which have effected a conservation of water. Some of the more important practices now being utilized are the reuse and recirculation of water wherever conditions permit, and the reconditioning of waste and wash water for reuse. As the need to extend available water supplies become progressively more acute, and with the increasing

establishment of industrial plants in water-short areas, a continual refinement in water conservation engineering may be predicted.

This bulletin presents the results of a survey of the State's manufacturing establishments. A request was made of all manufacturers operating in California in 1960 for water use information relative to the years 1957 through 1959. The purpose of the survey was to ascertain the present level of fresh water use and to establish a base period from which to predict future water use. Usable information was received from approximately 20 percent of the State's 27,000 manufacturing establishments. Many manufacturers were unable to provide data because their water needs were either supplied on a flat rate basis, or if supplied from wells, the quantities were not measured or, for other reasons, could not be determined.

The questionnaire which the manufacturers were requested to fill out asked for information regarding water intake, kinds of use within the industrial plant, source of water, and water treated, recirculated, and discharged.

The approach utilized in this report involves a categorization of industries into industry groups having similar activities and products and the development of unit water use values for these groups upon employee working days and water-using area of the plant. These unit values based on employee working days have particular significance because they can be related to other available information to estimate the present total fresh water use within groups.



WASHING AGGREGATE



WASHING AGGREGATE





Geographic groupings of industries are also possible to estimate present total fresh water use for particular areas such as counties. The standard industrial classification system devised by the U. S. Bureau of the Budget was used for the grouping of industries for determining unit water use values. This system is defined and described more fully in Chapter II.

Information was also requested concerning the quantity of water used related to the quantity of products produced, and the dollar value added to those products by the manufacturer. It is anticipated that this report will be supplemented at a later date with additional analysis of this and other information to be obtained from the questionnaires.

Studies have been made in the past of industrial water use in various regions of California. However, no studies have heretofore dealt comprehensively with unit values of water use for each industry group, nor have estimated the total water use by industry groups. Such is accomplished in this report.

#### Objectives

The primary objectives of the industrial water use survey were: (1) to estimate present total fresh water use by manufacturing industries in California by industry group and by county, and (2) to provide a base period from which future industrial water use may be estimated. Correlative objectives based upon tabulations of reported data were:

(1) to determine the source and quantity of fresh water intake for manufacturing, (2) to determine the quantity and purpose of total and fresh water use by the manufacturing industries, and (3) to obtain an indication of the extent of the use of brackish water within the State for manufacturing.

#### Scope of Report

In general, this is a basic data report. No attempt was made to prepare and present a detailed analysis of the results.

Only the most salient and obvious points are discussed.

This bulletin is composed of three chapters of text and illustrations, a section of tables, an appendix, including a bibliography, and plates. Chapter I discusses the need, objectives, and scope of the report, and presents a summary and conclusions of the results. A short discussion of the methods and procedures developed and utilized during the course of the survey is presented and discussed in Chapter II. Results of the survey are presented in Chapter III, and the data is shown in various tables and figures following Chapter III. Details pertaining to procedures for handling of the data and data processing are described in Appendix A. A sample of the questionnaire used for the survey and a copy of the letter of transmittal to the manufacturer are included in Appendix B.

Water quality is very important in the location of certain types of manufacturing industries. For example, water used in the manufacture of textiles and high-grade paper requires that iron content be extremely low. With textiles and carbonated beverages, water must be sparkling, free of organic and inorganic suspended matter, color, and relatively free of dissolved minerals, especially calcium and magnesium. Furthermore, requirements for pure process

### WATER USE IN INDUSTRY (DWR Photographs)



TRANSPORTING SUGAR BEETS

WASHING BEEF CARCASS





water are so stringent in many industries that plants often employ extensive and complex treatment techniques in addition to obtaining high-quality, natural water. Water quality problems are beyond the scope of this report, and, although data were obtained relative to water treated and use of fresh and/or brackish water, this data does not provide any information concerning water quality needs. No request was made for quantities of brackish or low grade water which could satisfactorily meet plant quality requirements and which might substitute for fresh water presently used.

#### Summary and Conclusions

Numerous summary statements may be drawn from the data; however, only those considered to be more significant are listed. Many other detailed facts and conclusions may be observed or computed from the tables. The information presented herein represents the average annual water use for the years 1957 - 1959.

- 1. Twenty percent of the State's manufacturing establishments provided usable information; however, approximately 50 percent of the total employment (manufacturing) pool is represented.
- 2. Response to the survey was best from the high water-using establishments.
- 3. A relatively few major industry groups use most of the water. Among these, the Food and Kindred Products Major Industry Group has the highest fresh water use; however, the Petroleum Refining and Related Industries Major Industry Group has the highest total water use, including brackish water.
- 4. Brackish water is used in 13 counties and amounts to approximately 46 percent of all intake water reported used for manufacturing.

-9-

- 5. The Petroleum Refining Industry recycles large quantities of its intake water. Overall industry intake requirements would more than double if no water were recirculated.
- 6. Cooling is the largest water use reported in the Petroleum Refining Industry. Manufacturing industries, in general, reported that one-half of the intake water is used for cooling purposes.
- 7. Almost as much water is treated after use for disposal as is treated prior to use.
- 8. Most of the larger water-using manufacturing groups provide for their fresh water needs through company systems, while the smaller users purchase water from water supply agencies. As a result, approximately 59 percent of all fresh water intake reported is derived from company systems, while the remaining 41 percent is received from water service agencies. With the exclusion of Los Angeles County, where ground water extraction in the coastal areas is considerably limited by legal control, the quantity of fresh water intake derived from company systems is around 68 percent statewide.
- 9. During the period from 1957 through 1959, the manufacturing industry used approximately 39.9 billion cubic feet, or about 917,000 acre-feet, of fresh water annually.
- 10. The South Coastal area, including Los Angeles, Orange, San Bernardino, and Riverside Counties, has the highest manufacturing water use in the State, with about 11.6 billion cubic feet (266,000 acre-feet) annually. The San Francisco Bay metropolitan area follows closely with about 11.0 billion cubic feet (253,000 acre-feet).
- 11. Six counties are estimated each to use more than 1 billion cubic feet of fresh water annually for manufacturing.

#### CHAPTER II. METHODS AND PROCEDURES

In July 1960, questionnaires were sent to 27,000 manufacturing establishments within the State. The mailing list was obtained from the Department of Employment which maintains the most complete file of industries.

The questionnaire was modeled after one used by the U. S. Bureau of the Census in its 1954 Census of Manufacturers. However, it was modified to meet some of the particular needs for information by the department. The information requested covered the three-year period 1957-1959, and included all manufacturers regardless of the quantity of water withdrawn, used, or discharged.

A covering letter emphasized the importance of certain questions, the answers to which were needed in computing unit values of water use based on employees and on area. These questions included total water intake, number of employees, and number of working days during the year.

Each establishment was asked to complete 14 questions pertaining to its water use, source of water, discharge, recirculation, treatment of water, size of plant, and employment.

The questionnaire was also designed to provide information pertaining to unit values of water use based on dollar value added by manufacture, and estimated future water use. These data have not been processed as yet because the information was not adapted to machine handling methods, and must await subsequent analysis.

#### Survey Response

The mailing list used contained only names and addresses of those manufacturing establishments on record with the California State Department of Employment. There is no assurance that this list contained every "manufacturing" establishment in the State of California, but it was the most complete list available.

The total response to the survey was approximately 25 percent. Of those manufacturing establishments that responded, about 80 percent contained information utilized for the report. The industries reporting were, in general, those that use the larger quantities of water and which maintain the best records relative to water use. It would be expected, therefore, that the unit use values developed for the higher water-using industries would be more accurate than for the lower water-using industries. Likewise, the estimates of county and industry total water use made by extrapolating the survey data are probably more accurate for the higher water-using industries than for the low water users.

#### Procedure for Determining Unit Use Values

On the basis of the reported data, two types of unit use values were determined. One was determined upon the basis of the water-using area of the plant, and the other upon the basis of the employee working day. The unit value of water use per square foot of plant area was calculated by dividing the total volume of intake water, in cubic feet, by the total water-using area, in squar feet, reported for each industry group. The unit value of water

use based upon employee working day was similarly calculated by dividing the total volume of intake water, in cubic feet, by the weighted product of the total number of employees times the average number of working days for each establishment reported for each industry group. Further details concerning the machine processing procedures are presented in Appendix A. The unit use value based upon area appears to be subject to more variation than the value based upon the employee working day.

#### Procedure for Estimating Total Water Use

Reasonable estimates could be made of total water use by each industrial group in each county by utilizing employment data available from the Department of Employment and the average unit values based on employee working days. Minor discrepancies occur as a result of differences in defining reporting units by the survey as compared to the Department of Employment, but overall it is felt that the method does provide a reasonable estimate. The area method was not usable for estimating total water use, as no information is available regarding the total water-using area of industry.

Although not shown in this report, wherever information was available, unit water use values based upon employee working days were determined for each industrial group within each county for estimating total water use.

In those counties where unit values could not be determined, it was assumed that the unreported plants used water at the average statewide value for the industrial group.

In a few cases where no records were available upon which to determine unit use values for a particular industrial group, no estimates were made of the total water use of that group. This quantity of water use, however, would be very small and would have little effect on the overall county or state totals.

#### Method of Classification and Definitions

Standard definitions alone are not enough to assure strict comparability of industry data published by various agencies, because of variation in classifications of the industries by each agency, degree of response and accuracy of information supplied by respondents, and use of sampling techniques as compared to complete coverage. Factors causing differences must be taken into account in interpretating the survey data.

The Standard Industrial Classification, which was the classification system utilized in this report, has considerable valuin maintaining uniformity and consistency of comparison between industrial groups.

#### Standard Industrial Classification

The Standard Industrial Classification segregates establishments by type of activity in which engaged. It covers the entir range of economic activities which are grouped in the following 10 divisions: agriculture, forestry, and fisheries; mining; contractionstruction; manufacturing; transportation, communication, electric gas, and sanitary services; wholesale and retail trade; finance,

insurance, and real estate; services; government; and nonclassifiable establishments.

Bulletin No. 124 deals only with industries within Division D, designated as manufacturing. It consists of 21 major groups. A complete definition of "manufacturing" as set forth in the Standard Industrial Classification Manual is presented in the next section.

Each establishment is assigned an industry code number on the basis of its major activity, which is determined by the product or group of products produced or handled or services rendered. Each is characterized by a four-digit classification. The first two digits signify the major group within the division. The third digit indicates the industry group number within the major group, and the fourth digit specifies the type of industry within the group. An example is shown below:

Major Group 20

- Food and Kindred Products

Industry Group 203

- Canning and Preserving Fruits, Vegetables, and Sea Foods

Industry 2036

- Fresh or frozen packaged Fish

#### Manufacturing

The Standard Industrial Classification Manual defines manufacturing as:

"... those establishments engaged in the mechanical or chemical transformation of inorganic or organic substances into new products, and usually described as plants, factories, or mills, which characteristically use power driven machines and materials handling equipment. Establishments engaged in assembling component parts or manufactured products are also considered manufacturing

if the new product is neither a structure nor other fixed improvement.

"The materials processed by manufacturing establishments include products of agriculture, forestry, fishing, mining, and quarrying. The final product of a manufacturing establishment may be 'finished' in the sense that it is ready for utilization or consumption, or it may be 'semifinished' to become a raw material for an establishment engaged in further manufacturing. For example, the product of the copper smelter is the raw material used in electrolytic refineries; refined copper is the raw material used by copper wire mills; and copper wire is the raw material used by certain electrical equipment manufacturers.

"The materials used by manufacturing establishments may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another which is under the same ownership. Manufacturing production is usually carried on for the wholesale market, for interplant transfer, or to order for industrial users, rather than for direct sale to the domestic consumer.

"Printing, publishing, and industries servicing the printing trades are classified as manufacturing industries.

"There are borderline cases between the manufacturing division and the other division in the classification system.\*

"Processing on farms is not considered manufacturing if the raw materials are grown on the farm and if the manufacturing activities are on a small scale without the extensive use of paid labor. Other exclusions are custom grist milling, threshing, and cotton ginning."

<sup>\*</sup>It should be noted that steam-generated electricity is not included under Division D (Manufacturing) of the Standard Industrial Classification Manual.

#### Miscellaneous Definitions

Other water use terms used in this industrial report are defined as follows:

Establishment -- An economic unit which produces goods or services -- for example, a farm, a mine, a factory, a store. In most instances, the establishment is at a single physical location, and it is engaged in only one, or predominantly one, type of economic activity for which an industry code is applicable.

Employee -- Each person on the payroll of an operating manufacturing establishment for any duration.

Working Day -- Any day during which the establishment is operated by some or all employees.

Employee Working Days -- The product of the average annual number of employees and working days.

Brackish Water -- Sea water, any mixture of sea water and surface runoff which occurs in estuaries or at the lower reaches of streams that debouch into a bay or ocean, or other highly mineralized water.

<u>Water-Using Plant Area</u> -- The portion of the plant, in square feet, in which intake water may be used for any purpose and wherein water may be developed, treated, recirculated, and discharged. It does not include parking, storage, or idle space on the premises, or plant areas in which water has no function.

<u>Urban Water Use</u> -- The use of water for urban purposes including, but not limited to, residential, commercial, industrial, municipal, military, and institutional classes. The term is applied in the sense that it is a kind of use rather than a place of use.



#### CHAPTER III. ANALYSIS OF THE DATA

This chapter presents and discusses the results of the industrial water use survey. Although the data were tabulated in detail, only summary tables and charts are published herein. This is due to the volume of data involved and to the fact that, in some cases publication of more detailed information might reveal information of a confidential nature regarding an individual establishment.

Tables 1 through 5 are summations of the data reported by various industries. Tables 6 and 7 present estimates of total water use by industrial groups and by county. Table 8 shows quantity of water used by the major water using industries in the principal water using counties. Some data, received subsequent to the closing date set for the survey, while affecting individual county and industry totals reported in Tables 1 through 5. had little effect on the total overall estimates and so were not incorporated into the report.

It should be noted that the number of plants reporting usable data varies from table to table, according to the completeness of the returns of individual items. In all cases, an effort was made to include all usable information.

## Discussion of Results

A list of all the industrial groups in California and the range in water use for the responding industries is shown in Table 1. Approximately 19 percent of the industries provided usable information.

The highest responses within the major industry groups were from the petroleum refining and related industries; chemical and allied products; food and kindred products; primary metal industries; and stone, clay and glass products. This is illustrated graphically on Figure 1 of Plate 1 entitled "Water Use by Manufacturing Industries in California, 1957-1959."

Fewer responses were received from the tobacco manufacturers; apparel and other products; printing, publishing, and allied products; furniture and fixtures; and leather and leather products major industry groups. As previously stated, industry groups which provided a high response were also those which, in general, used the highest quantities of water. For example, the sugar industrial group, responding at a rate of 90 percent, used water at quantities varying from 10 million to 1 billion cubic feet per plant annually.

This pattern of response is partially explained by the fact that more accurate records are maintained where significant quantities of water are used in plant operations. In addition, individual customer accounts are generally available in cases where water is provided by a public water service agency and where charges are on the basis of quantity used. On the other hand where the responses were low, it was frequently found that manufacturing plants were located in large buildings with other tenants. Where water was included with the rent, and individual accounts for each tenant were seldom available. For the most part, water supplied by public agencies is metered. Occasionally, however flat rate, monthly, or bimonthly charge systems are still being used, and records of water use by individual water using entities are nonexistent.

The average annual total water intake by major industry and industry group is shown in Table 2. Of 118 industrial groups reporting, only 25 included plants using brackish water. The use of brackish water, however, accounted for 46 percent of all intake water used for manufacturing, exceeding fresh water intake from either public water supply or from company-produced sources. The petroleum refining and related industries major industry group leads with 75 percent of its intake being brackish water, followed by the chemical and allied products major industry group with 53 percent.

The major industrial groups also vary considerably with respect to the origin of their fresh water supplies. Overall, it is significant that approximately 59 percent of all reported fresh water intake for manufacturing is derived from company systems, while 41 percent is from water service agencies. While most of the high water-using industries provide for their own needs, the petroleum refining and related industries are unusual in that 70 percent of their needs are filled from public agency supplies.

This may be explained, in part, by the fact that the petroleum refining and related industries are the major fresh water users in Los Angeles County and that in the coastal area of Los Angeles County considerable legal control is exercised over ground water extractions.

Figure 2 on Plate 1 graphically compares the total water intake of brackish and fresh water of the various major industrial groups responding. The major industry group of petroleum refining and related industries, with 43-1/2 percent of the industries reporting, has a water intake of 12.1 billion cubic feet. The

major food and kindred products industry group, however, with 35 percent of the plants responding, has the largest fresh water intake, showing use of 5.2 billion cubic feet.

Table 3 shows the total water intake, by county, as reported by the various manufacturing industries. Sources of water are segregated as in Table 2 by fresh water from public or company-owned systems and water withdrawn from brackish sources. Counties are listed alphabetically, and the number of plants which reported from each county are indicated. In most counties, the greatest quantity of fresh water intake is company-produced rather than purchased.

The source of fresh water, whether derived from public or company systems, depends on a number of contributing factors. Generally, establishments that purchase water are small, have small unit requirements, are located where ground or surface water supplies are not readily available, and are situated in urban areas served by large public agencies. On the other hand, enterprises with self-supplied water are very often large and with high employment, reflect high unit water requirements, and are usually located in rural areas or areas in which local water resources are readily developed.

It is interesting to note that three counties, namely Contra Costa, Los Angeles, and Monterey, account for 90 percent of the total brackish water used by industry.

The quantities of water used for various manufacturing purposes are indicated in Table 4. This table also shows quantities of water treated before and after use, water recirculated, and



WATER USE IN INDUSTRY

(DWR Photographs)

COOLING OF PRODUCTS
DERIVED FROM COKE



PROCESSING OLIVES
IN BRINE VATS



-24-

total water requirements assuming no recirculation of water. About 8 percent of the industry groups provided usable data for this table which may be somewhat biased in favor of higher water-using industries and those which maintain better records. Many industry groups used no water for processing, cooling, or other high-rate purposes. This is especially true of apparel and printing industries which use water only for drinking and sanitation.

As shown in Figure 3 on Plate 1, one-half of all reported intake water is used for cooling purposes. The next most important use, but in much smaller quantities, is process water, followed by sanitary and miscellaneous uses, and finally boiler feed. On the other hand, boiler feed has the highest overall quality requirement, and water for this purpose is nearly always first treated to reduce boiler scale and other detrimental properties of the natural supply. It is also interesting to observe that almost as much water is treated prior to discharge as is treated before use.

In many instances, manufacturers have found it economical to reuse water one or more times. Where processes and functions permit the use of water of successively lower grades, the water may be recycled several times. These conservation measures are largely responsible for the high rate of reuse found in the manufacturing industry as a whole. For example, the petroleum refining industry recycles a large percentage of its intake. Other industries which recirculate at least 50 percent of their intake water include paper and allied products; rubber and miscellaneous plastic products;

stone, clay, and glass products; and primary metal industries. Some plants reuse water a dozen times or more.

As might be expected, more examples of reuse may be found in Southern California where water supplies are less readily available and where the demand on and cost of the resource is greater than in the northern part of the State. As shown in Figure 3 on Plate 1, the total water requirement would have more than doubled had there been no recirculation.

Although only 12 percent of the manufacturing industries provided information suitable for computing unit values of water use based on the employee working day and plant water using area, as shown in Table 5, more than 43 percent of the entire employment pool of the State was represented. Of 149 groups of manufacturers, 100 groups reported some information, while 49 could not provide usable data in this category. As in previous tables, the most complete records were available from companies using large quantities of water, either purchased from public water agencies or self-produced.

Of the 22 major manufacturing groups, only the ordinance and accessories group and the tobacco industry are not represented in Table 5. The degree of response varied considerably, however, among the major groups and within each major group. Among the higher contributors of data were the petroleum refining and related industries; chemical and allied products; primary metal industries; stone, clay, and glass products; and food and kindred products major industry groups. In addition, electrical machinery; transportation equipment; stone, clay, and glass products; rubber and miscellaneous

plastics products; primary metal industries; and the chemical and allied products major industry groups responded with unit use information representing more than 50 percent of the employees in each of the major groups. Only in the apparel, leather, and furniture groups were the responses from numbers of plants and percentages of employees expectedly low.

As shown in Figure 4 on Plate 1, the average unit value of water use per employee work day varies considerably between industrial groups. Furthermore, while not shown here, the range within an industrial group may be somewhat large. For example, in the industrial group of sawmills and planning mills, a few extremely high unit values were found where mill ponds used to float and wet logs were located on porous material which percolated water at excessive rates. On the other hand, plants which are electrically powered or operated by compressed air require very little water. An average unit value for sawmills and planning mills has little significance for an individual plant unless the types of logging or milling operations are more specifically identified.

In the Food and Kindred Products major group, the sugar industry, which has the second highest average unit water use per employee, has a much smaller range between high and low values.

As shown in Table 5, six manufacturing groups used more than 1,000 cubic feet of water per square foot of water-using plant area. Paperboard mills, with a unit value of 3,127 cubic

feet, nearly twice that of the others. Again, a considerable range of values was found to exist, due in part to the heterogeneity of plants, products, and processes used.

The estimated total fresh water use for each major industrial group within each county is shown in Table 6 and Figure 5 on Plate 1. These estimates of water use were derived using unit values of water use per employee, multiplied by the total number of employees for each industrial group within each county when such data were available. In those counties where unit values could not be determined, it was assumed that the unreported plants used water at the average statewide value for the industrial group.

In a few cases where no records were available upon which to determine unit use values for a particular industrial group, no estimates were made of the total water use of that group. This quantity of water use, however, would be very small and would have little effect on the overall county or state totals.

Table 7 shows the estimated statewide total annual fresh water use for each industry group.

As pointed out previously, California industry is primarily centered around its natural resources. The total fresh water use of the major industry groups of "food and kindred products;" "lumber and wood products;" and "petroleum, refining, and related industries" accounts for 65 percent of the manufacturing industries water usage. With the inclusion of the water usage of the major industry groups of







# WATER USE IN INDUSTRY

(DWR Photographs)

MILL PONDS FOR FLOATING LO



"chemical and allied products;" paper and allied products;" and "stone, clay, and glass products," which are directly or closely related to the State's natural resources, approximately 87 percent of industry's use are taken into account.

Table 8 sets forth the water use intake of nine major industry groups within 23 counties each having an annual usage in excess of 300 million cubic feet or 7,000 acre-feet. The nine major industry groups account for slightly more than 95 percent of the estimated total fresh water use by California industries, and the 23 counties have intakes which are approximately 91 percent of manufacturing industry's total water use. Combined, Table 8 accounts for 86 percent of total manufacturing industrial water usage in California. The counties are grouped in approximate geographical areas to allow comparisons of the distribution and location of manufacturing industry throughout the State. The general location of each of the geographic areas and centers of manufacturing is shown on Plate 2, entitled "Centers of Manufacturing in California."

The water usage of the manufacturing industry in the northern mountainous area are primarily related to lumbering which processes fir, pine, and redwood.

The wood products industry has a wide range in water use from one establishment to another. Some operations, such as felling trees, stockpiling for immediate use at the mill, removing and transporting logs, and others, require only a minimum of water use. Mill operations, however, are usually



associated with very high quantities of water use for mill ponds, processing, and in sprinkling log decks. The latter is a recent innovation and will eventually replace or partially replace mill ponds in many establishments.

The major wood products manufacturing centers and shipping points are Eureka and the Red Bluff-Redding area. Humboldt Bay, serving Eureka and the northwest, is one of California's four principal harbors, and is the only landlocked harbor between San Francisco and the mouth of the Columbia River.

In the Sacramento Valley, the Red Bluff area marks a separation between intensive agriculture with its food processing industries and the forest products industry. Many of the largest lumber producers, including plywood, are situated here or to the north in the direction of Redding. Water is obtained mostly from wells, although the area is bisected by the Sacramento River.

Alturas and Susanville are major centers of development in northeastern California. The towns are located on the fringe of the heavy rainfall, and arid to semiarid conditions prevail east of these towns. Here water is in shorter supply, and manufacturing is limited primarily to a few sawmills and related wood products industries.

The Central Valley area is the heart of the agricultural belt, and manufacturing reflects this activity.

Generally speaking, manufacturing is not as extensive in the Sacramento Valley portion of the Central Valley as in the San

Joaquin Valley. Sacramento County has perhaps the highest number of manufacturers, with 309 diversified establishments out of a total of about 650 within the seven Sacramento Valley counties.

Proceeding southward through the Central Valley, food processing plants become more prevalent. It may also be noted that this area contains many satellite industries dependent upon the agricultural industry as a prime source of income. These consist of farm machinery and machine shops, concrete products, wooden containers, sheet metal, and other enterprises subsisting from agriculture.

Sacramento and San Joaquin Counties, alone, have close to 600 manufacturing plants. Sacramento's manufacturing industry is quite diversified, probably as a result of the rapidly expanding urbanization, while San Joaquin County activity is related more directly to food processing and is centered in the Stockton metropolitan area where at least 100 manufacturers produce items from agriculture or items needed in the pursuit of agriculture. Much of the produce grown in the famous Delta area of the Central Valley finds its way into the processing plants located in Stockton where it is frozen, canned, or in some way prepared for export.

Because of the central location within the heart of the nation's richest agricultural region, San Joaquin, Stanislaus, and Fresno Counties have become foremost in food processing and related enterprises.

Kern County is the second largest manufacturing county in the San Joaquin Valley in terms of numbers of plants. It is located in the southern end of the Central Valley, and displays the same general pattern of manufacturing diversity as others in the area, including an important petroleum refining industry.

The general location of manufacturing industry within the San Francisco Bay area is depicted on Plate 2.

This area is composed of 9 counties, each of which touches some point of the San Francisco Bay. Manufacturing, however, is more heavily concentrated in the south and east bay counties of San Francisco, San Mateo, Santa Clara, Alameda, and Contra Costa; but it is showing signs of expanding into the northern counties of Solano, Napa, Sonoma, and Marin.

A number of factors have contributed to the growing and diversification of manufacturing in the Bay area. Climate allows an efficient year-around operation. Good water, rail, air, and highway facilities, utilities, labor, and topography have been instrumental in this growth. Population has risen from about 1.7 million in 1940 to 3.6 million in 1960. A 35 percent increase was realized between 1950 and 1960.

Each portion of the San Francisco Bay area has certain characteristics which set it aside from neighboring communities. San Francisco, in many respects, is the hub of the area much as Los Angeles is in Southern California. Manufacturing industries occupy an important part of the

city's economy, as measured by a census of industry employment and payroll. More than 1,700 manufacturing units are located in San Francisco County and employment is more than 65,000 persons. Space is now limited for additional development.

San Mateo County, just south of San Francisco, has experienced a spectacular increase in population and manufacturing. Much of the new manufacturing is located in industrial parks. These are areas zoned for manufacturing or like industries, and generally fall into the lighter waterusing categories. Manufacture of electronics and scientific instruments, and the like, are commonly found here. Photographs of this new type of industrial accommodation are shown on the following page. The acreage zoned or used for this purpose has increased many fold during the past two decades.

Santa Clara County has also experienced a very rapid expansion of population and manufacturing. The industrially used land appears continuous through San Mateo County and into Santa Clara County, with much the same type of manufacturing in each. The complex of manufacturing differs, however, in that older established food products plants located well inside the county continue to be numerous and tend to influence water use by their high requirement. Although some water is imported, most is developed locally from wells. Santa Clara County water requirements are substantial and are continuing to grow rapidly along with population. Underground supplies,

#### LOW WATER USING MANUFACTURERS





Industrial Parks

Water use is generally low within the industrial groups occupying these new tracts.

- Courtesy of the San Mateo County Development Association -

however, are limited, and plans are in effect to import additional water.

Manufacturing in Alameda County and the metropolitan area of Oakland, containing the highly industrialized City of Emeryville has been established for many years. There are about 1,500 manufacturing plants in Alameda County, and approximately 825 in the City of Oakland. Twenty-two industrial tracts and parks have been recently noted. Manufacturing in Alameda County is highly diversified. Many of these use large quantities of water for their operation. Contra Costa County also has a great concentration of diversified manufacturing establishments. Among these are major petroleum refining companies which have exceptionally high water needs, a large part of which are satisfied with brackish supplies along the south shores of San Pablo and Suisun Bays.

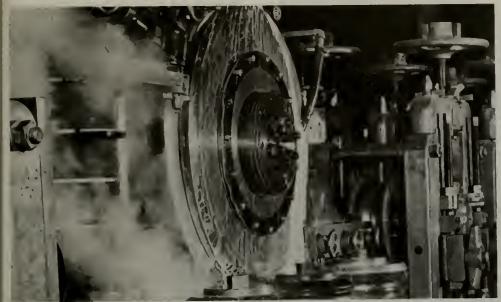
Some industrial expansion is now taking place in the north bay counties of Marin, Sonoma, Napa, and Solano; but they are not as yet heavily industrialized by comparison with the south and east bay localities described above. Some older types of manufacturing, including wineries in Napa and Sonoma Counties, have been in existence for many years.

Manufacturing is otherwise concentrated in and about the Cities of Benicia, Vallejo, Napa, and San Rafael.

New and diversified types are now establishing in these areas.

Water requirements associated with manufacturing within the Central Coastal area between San Francisco and Los Angeles are primarily related to processing food and

# HIGH WATER USING MANUFACTURERS



- Courtesy of Kaiser Corporation



- Courtesy of Kaiser Corporation -



(DWR Photograph)

PRODUCTILON

# HIGH WATER USING MANUFACTURERS

(DWR Photographs)







kindred products. The principal centers for such activities are Monterey and Santa Barbara.

The South Coastal area includes the Los Angeles metropolitan area in Los Angeles and Orange Counties, and the coastal
portions of San Diego, San Bernardino, and Riverside Counties.
The location and extent of manufacturing enterprises within the
Los Angeles and San Diego metropolitan areas are shown on Plate 2.

Manufacturing in the South Coastal area is highly diversified. Almost every type of manufacturing activity in the country is carried on here. The area now ranks as the country's third largest manufacturing center, and products of almost all known kinds originate here. Several of these manufacturing industries have very high water requirements. Impressive statistics developed by the Bureau of Census, indicates that from 1947 to 1954 value added by manufacturers in the Los Angeles metropolitan area, including Orange County, increased over 146 percent.

Southern California's industrial growth is centered primarily in the Los Angeles metropolitan area. The combination of abundant raw materials, distribution facilities, rail, highway, and freeway networks, ample labor pools, relatively low tax rates, and a supply of low-cost electricity makes conditions favorable for industrial location. In addition to a large number of California manufacturing industries which have developed in this area, an increasing number of national firms have established plants here. More of these companies are moving their regional or national headquarters into Southern California. Los Angeles

### NEW USES FOR WATER IN INDUSTRY



COOLING OF LAUNCHING PAD DURING ROCKET FIRING

(DWR Photograph)

REMOVING BARK FROM LOGS
- Courtesy of the Pacific Lumber Co. -

SPRINKLING LOGS TO PRESERVE QUALITY

(DWR Photograph)



manufacturing industry is said to be growing at the rate of about 450 new manufacturing establishments each year, and about one-third of its people are engaged in manufacturing.

The changing composition of the manufacturing industry is important in predicting industrial water needs in this area. What might be termed as growth industries, such as electrical machinery, scientific instruments, and others, represented only 3 percent of the Los Angeles industrial employment in 1939, but now these industries employ about 25 percent of the labor pool. Early manufacturing industries, such as food and kindred products and stone, clay, and glass products, accounted for one-fifth of the 1939 working pool, but have since dropped to about 10 percent. As pointed out in the tables, food and kindred products industries have high water usage; other major industry groups such as electrical machinery and transportation equipment have a considerably smaller water use. One may surmise from this information that in predicting future manufacturing water needs the expected make-up or proportionment of the various manufacturing groups must be considered.

Adjacent to the Los Angeles metropolitan area, San
Bernardino and Riverside Counties join in a more or less contiguous strip of development from Los Angeles continuing eastward nearly to the Cities of San Bernardino and Riverside. Manufacturing establishments are dispersed along this route. The San
Diego metropolitan area is also important industrially. The city houses a number of large aircraft parts manufacturers. The desert area beyond the metropolitan areas has very little manufacturing.

A detailed analysis of Tables 6, 7, and 8 would disclose many additional interesting facts. Certain manufacturing groups have geographic limitations. For example, some industries are located near a source of brackish water for cooling, while disposal problems of discharge waters sometimes dictate the location of other industries. A discussion of these factors is beyond the scope of this report, and will not be considered herein. The reader of this report, however, is invited to utilize this data in any way he may within the limitation of accuracy imposed by the survey.

RANGE OF AVERAGE ANNUAL WATER USE WITHIN INDUSTRY GROUPS
1957 - 1959
(MILLIONS OF CUBIC FEET)

					Plants Rep	Plants Reporting Water Intake	ntake		
SIC	discret visited	Number of	1		Gross Intok	Grass Intoke in millions of cubic feet	of cubic feet	per year	
Code	door discount	Plants	Total	than 0.1	0.1 - 1	1 - 10	10 - 100	100 - 1000	1000
191	GUNS, HOWITZERS, MORTARS & RELATED EQPMNT								
192	AMMUNITION. EXCPT SMALL ARMS	17	-			-		_	
193	TANKS & TANK COMPONENTS	-	7			-			
194	SIGHTING & FIRE CONTROL EQUIPMENT	2	-		7				
195	SMALL ARMS	6	7	7					
196	SMALL ARMS AMMUNITION	3							
199	ORDNANCE & ACCESSORIES N.E.C.	9		1					
190	ORDNANCE AND ACCESSORIES	38	-5	2	-	2			
201	MEAT PRODUCTS	373	108	36	37	27	7	rd.	
202	DAIRY PRODUCTS	346	111	19	37	35	26		
203	CANNING & PRESERVING FRUITS ETC.	582	256	69	69	73	77	7	
204	GRAIN MILL PRODUCTS	232	83	51	21	6	2		
205	BAKERY PRODUCTS	309	76	04	59	7			
206	SUGAR	12	11				<b>0</b> 0	e	
207	CONFECTIONERY & RELATED PRODUCTS	139	41	20	18	n			
208	BEVERAGE INDUSTRIES	390	148	31	89	35	13	-	-
209	MISCELLANEOUS FOOD PREPARATIONS ETC.	687	173	57	66	90	7		
200	FOOD AND KINDRED PRODUCTS	2872	1013	323	338	239	107	9	
211	CIGARETTES								
212	CIGARS	80							
213	TOBACCO AND SNUFF								
214	TOBACCO STEMMING AND REDRYING								
210	TOBACCO MANUFACTURES	<b>o</b> c							
221	BROAD WOVEN FABRICS. COTTON	2							ABLE
222	BROAD WOVEN FABRICS, SYNTHETICS & SILK	7	1			1			

TABLE 1 (CONTINUED)

RANGE OF AVERAGE ANNUAL WATER USE WITHIN INDUSTRY GROUPS 1957 - 1959 (MILLIONS OF CUBIC FEET)

Ì						107			
	,	Number of			Gross Intak	Gross Intake in millions of cut	Flants Reporting water intake Gross Intake in millions of cubic feet per year	per year	
S.I.C. Code	Industry Group	Plants	Total	less than 0.1	0.1 1	1 - 10	10 - 100	100 - 1000	over 1000
223	BROAD WOVEN FABRICS, WOOL	13	М	2		-			
224	NARROW FABRICS & OTHER SMALLWARES	11	7	1					
225	KNITTING MILLS	7.8	S	4	ı				
226	DYEING & FINISHING TEXTILES EXCEPT WOOL	27	7	2	m	2			
227	FLOOR COVERING MILLS	37	7	5	-	-			
228	YARN & THREAD MILLS	7	2	1	٦				
229	MISCELLANEOUS TEXTILE GOODS	58	10	4	2	1			
22 n	TEXTILE MILL PRODUCTS	237	36	19	11	•			
231	MENS & BOYS SUITS COATS & OVERCOATS	54	2	2					
232	MENS & BOYS FURNISHINGS ETC.	245	14	11	9				
233	WOMENS MISSES & JRS OUTERWEAR	166	41	37	7				
234	WOMENS MISSES ETC. UNDERGARMENTS	80	2	2					
235	HATS CAPS & MILLINERY	61	1	1					
236	GIRLS CHILDRENS & INFANTS OUTERWEAR	84	4	4					
237	FUR GOODS	63	1						
238	MISC. APPAREL & ACCESSORIES	80	3	2	7				
239	MISC. FABRICATED TEXTILE PRODUCTS	531	07	37	6				
230	APPAREL & OTHER PRODUCTS ETC.	2195	108	16	11				
241	LOGGING CAMPS & CONTRACTORS	198	31	22	ľΩ	60	1		
242	SAWMILLS & PLANING MILLS	570	157	7.1	33	56	21	ς.	-
243	MILLWORK VENEER PLYWOOD ETC.	510	66	75	14	80	2		
244	WOODEN CONTAINERS	127	22	15	2	2			
249	MISC. WOOD PRODUCTS	251	43	34	4	<b>ω</b>			
240	LUMBER & WOOD PRODUCTS EXCEPT FURNITURE	2256	352	217	61	77	54	δ.	<b>~</b>
251	HOUSEHOLD FURNITURE	1031	105	91	13	1			

RANGE OF AVERAGE ANNUAL WATER USE WITHIN INDUSTRY GROUPS 1957 - 1959 (MILLIONS OF CUBIC FEET)

		1			Plants Rep	Plants Reporting Water Intake	Intoke		
S.I.C.	Industry Graup	Number of	1		Grass Intak	e in millions	Grass Intake in millions of cubic feet per year	per year	
Code		rignis	l ordi	than 0.1	0.1 1	1 - 10	10 - 100	100 1000	1000
252	OFFICE FURNITURE	38	9	m	m				
253	PUBLIC BUILDING & RELATED FURNITURE	30	4	2	2				
254	PARTITIONS ETC. OFFICE & STORE FIXTURES	236	56	23	n				
259	MISC. FURNITURE & FIXTURES	120	13	12	7				
250	FURNITURE & FIXTURES	1455	154	131	22	1			
261	PULP MILLS								_
292	PAPER MILLS EXCEPT BUILDING PAPER MILLS	9	2				1		
263	PAPERBOARD MILLS	31	<b>6</b> 0		ı	2	9	2	
264	CONVERTED PAPER PRODUCTS EXCEPT BOXES	179	43	24	15	E	1		
265	PAPERBOARD CONTAINERS & BOXES	160	94	25	11	80	1	7	
266	BUILDING PAPER & BUILDING BOARD MILLS	6	e.	1			1	1	
260	PAPER & ALLIED PRODUCTS	385	102	50	27	13	7	5	
271	NEWSPAPERS PUBLISHING & PRINTING	579	75	64	19	4	6		
272	PERIODICALS PUBLISHING & PRINTING	213	2	1	1				
273	BOOKS	106	5	5					
274	MISC. PUBLISHING	163	4	9	1				
275	COMMERCIAL PRINTING	1562	152	139	12	1			
276	MANIFOLD BUSINESS FORMS MFG.	41	6	80	H				1
277	GREETING CARD MANUFACTURING	23	2	2					
278	BOOKBINDING & RELATED INDUSTRIES	128	18	15	60				
279	PRINTING TRADE SERVICE INDUSTRIES	224	29	22	1				
270	PRINTING, PUBLISHING & ALLIED INDUSTRIES	3039	296	544	77	5	6		
281	INDUSTRIAL INORGANIC & DRGANIC CHEMICALS	159	89	22	27	21	18		П
282	PLASTIC MATERIALS ETC. EXCEPT GLASS	72	34	13	11	7	2	1	ABLE
283	DRUGS	121	39	24	8	7			

TABLE 1

TABLE 1 (CONTINUED)

RANGE OF AVERAGE ANNUAL WATER USE WITHIN INDUSTRY GROUPS
1957 - 1959

(MILLIONS OF CUBIC FEET)

Subset   S		(MIL	(MILLIONS OF CUBIC FEET)	IC FEET)						
Name   Individual Charap			7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Plonts Rep	orting Water	ntake	3000	
SOAP DETERGENTS, COSMETICS ETC.  212 74 55 60W 6 MOOD CHAMICALS GUN 6 MOOD CHAMICALS GUN 6 MOOD CHAMICALS GUN 6 MOOD CHAMICALS MISC. CHEMICALS MISC. PETROLEUM REFINING MISC. PETROLEUM MI	S.I.C. Code	Industry Group	Plonts	Totol	less thon 0.1	0.1 1	1 – 10	10 - 100	100 - 1000	0001
AGRICAL CALLED PRODUCTS  GUM & WOOD CHEMICALS  MISC. CHEMICAL PRODUCTS  CHEMICAL CALLED PRODUCTS  PETROLEUM REFINING  PAYING & ROOFING MATERIALS  FOR 136 42 33 6 28  PETROLEUM REFINING  FOR 137 11 15 5 11 11 18  MISC. PETROLEUM REFINING  FOR 137 66 117 11 18 13  THES & INNER TUBES  THE & INTER TUBES  THE & INTER TUBES  THE & INTER TUBES  THE TUBES  THE & INTER TUBES  THE TUBES	284	SOAP, DETERGENTS, COSMETICS	273	76	55	12	7	2		
AGRICULTURAL CHEMICALS  MISCs. CHEMICALS  MISCs. CHEMICALS  MISCs. CHEMICAL PRODUCTS  HISCs. CHEMICAL PRODUCTS  HISCs. CHEMICAL PRODUCTS  HISCs. CHEMICAL PRODUCTS  HISCs. CHEMICAL CALLIED PRODUCTS  HISCs. CHEMICAL CALLIED PRODUCTS  HISCs. CHEMICAL CALLIED PRODUCTS  HISCs. PETROLEUM REFINING  PAYING & ROOFING MATERIALS  HISCs. PETROLEUM REFINING & RELATED INDUSTRIES  HISCS & INNER TUBES  RECLAIMED RUBBER  RECLAIMED RUBBER  RECLAIMED RUBBER  RECLAIMED RUBBER  HISCS & INNER TUBES  HISCS & LEATHER BELTING & PACKING  HISCS & HISCS & HISTING & PACKING  HIDDUSTRIAL LEATHER BELTING & PACKING  HISCS & HISCS & HITTENS  LUGGAGE  HANDBAGS & OTHER PERSONAL LEATHER GOODS  LEATHER GOODS NA.E.C.  LEATHER GOODS NA.E.C.  144  157  168  177  187  187  187  187  187  18	285	PAINTS, VARNISHES, LACOUERS, ENAMELS	212	74	50	19	4	1		
AGRICULTURAL CHEMICALS  MISC. CHEMICAL PRODUCTS  MISC. CHEMICAL PRODUCTS  CHEMICAL PRODUCTS  CHEMICAL PRODUCTS  CHEMICAL CALLED PRODUCTS  CHEMICAL C ALLIED PRODUCTS  CHEMICAL C ALLIED PRODUCTS  CHEMICAL C ALLIED PRODUCTS  PETROLEUM REFINING  PAVING C ROOFING MATERIALS  MISC. PETROLEUM REFINING C RELATED INDUSTRIES  MISC. PARTICATED RUBBER PRODUCTS  RUBBER FOOTWEAR  RECLAIMED RUBBER PRODUCTS  MISC PLASTICS PRODUCTS  MISC MITTENS  MACHINER SELTING C PACKING  BOOT C SHOE CUT STOCK C FINDINGS  MACHINER CLOVES C MITTENS  LUGGAGE  MANDHAGS C OTHER PERSONAL LEATHER GOODS  MEANDHAGS C OTHER PRODUCTS  MISC MACHINER COODS N.E.C.  MI	286		14	1	1					
137   50   28   14   6   2	287		108	45	21	14	7	3		
CHEMICAL & ALLIED PRODUCTS         1096         408         214         105         59         28           PETROLEUM REFINING         80         36         4         3         11         1	289		137	50	28	14	9	2		
PETROLEUM REFINING  PAVING & ROOFING MATERIALS  PAVING & ROOFING MATERIALS  PAVING & ROOFING MATERIALS  PETROLEUM REFINING & RELATED INDUSTRIES  177	280	CHEMICAL & ALLIED PRODUC	1096	408	214	105	69	28	1	1
PAVING & ROOFING WATERIALS         52         13         2         3         6         2           MISC* PETROLEUM & COAL PRODUCTS         45         17         11         11         5         1           PETROLEUM REFINING & RELATED INDUSTRIES         177         66         17         11         18         13           TIMES & INNER TUBES         21         8         2         2         1         3           RUBBER FOOTWEAR         5         13         40         24         13         1         3           RUBBER FOOTWEAR         5         130         40         24         15         1         3         4           RUBBER FOOTWEAR         602         130         87         36         3         4         1         2         4           MISC PLASTICS PRODUCTS         602         130         87         36         3         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         4         1         2         4         4         1         2         4         4         1         2         4	291		80	36	4	9	11	11	7	
NECK-PETROLEUM & COAL PRODUCTS	295		55	13	2	6	9	2		
PETROLEUM REFINING & RELATED INDUSTRIES         177         66         17         11         18         13           TIKES & INNER TUBES         2         2         2         1         3           RUBBER FOOTWEAR         2         1         2         1         3           RUBBER FOOTWEAR         5         1         4         4         6         1         1         3           RUBBER FOOTWEAR         6         130         40         24         15         1         1         4         1         1         1         4         1         1         4         1         2         4         4         1         2         4         4         1         2         4         4         1         2         4         4         1         2         4         4         1         2         4         4         1         2         4         4         1         2         4         4         4         4         4         1         2         4         4         4         1         2         4         4         4         1         2         4         4         4         4         4         4	299	MISC. PETROLEUM & COAL	45	17	111	5	1			
TIRES 6 INNER TUBES         2         2         1         8         2         2         1           RUBBER FOOTWEAR         2         1         2         1         2         1	290		177	99	17	11	18	13	7	
RUBBER FOOTWEAR         2         1         2         1         1         2         1         2         1         2         3         3         3         3         3         3         3         3         3         3         3         3         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4         1         2         4	301	TIRES	21	60	2	2	1	m		
RECLAIMED RUBBER         5         1         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         2         3         3         3         3         3         3         3         3         3         4	302		2							
FABRICATED RUBBER PRODUCTS N.E.C.         130         40         24         15         15         1           MISC PLASTICS PRODUCTS         444         81         61         19         19           RUBBER & MISC. PLASTICS PRODUCTS         602         130         87         36         3           RUBBER & MISC. PLASTICS PRODUCTS         17         7         4         1         2           LEATHER TANNING & FINISHING         8         1         4         1         2           BOOT & SHUE CUT STOCK & FINDINGS         8         57         7         5         2           FOOTWEAR, EXCEPT RUBBER         14         3         3         3         1           LEATHER GLOVES & MITTENS         14         3         3         1         1           LUGGAGE         HANDBAGS & OTHER PERSONAL LEATHER GOODS         46         3         3         3         1           LEATHER GOODS N.E.C.         216         25         19         4         2         4	303		5	1			<b>~</b> 1			
MISC PLASTICS PRODUCTS         444         81         61         19         36         3           RUBBER & MISC. PLASTICS PRODUCTS         602         130         87         36         3           LEATHER TANNING & FINISHING         17         7         4         1         2           INDUSTRIAL LEATHER BELTING & PACKING         8         8         1         2           BOOT & SHUE CUT STOCK & FINDINGS         8         7         57         7         5         2           FOOTWEAR, EXCEPT RUBBER         57         7         5         2         2         2           LEATHER GLOVES & MITTENS         14         3         3         3         1         1           LEATHER GOODS N.E.C.         34         3         3         3         4         2           LEATHER & CLEATHER PRODUCTS         216         25         19         4         2	306	FABRICATED RUBBER PRODUCTS	130	0 7	54	15	1			
RUBBER & MISC. PLASTICS PRODUCTS       602       130       87       36       3         LEATHER TANNING & FINISHING       17       7       4       1       2         INDUSTRIAL LEATHER BELTING & PACKING       8       8       1       2         BOOT & SHOE CUT STOCK & FINDINGS       8       57       7       5       2         FOOTWEAR, EXCEPT RUBBER       14       3       3       3         LEATHER GLOVES & MITTENS       14       3       3       1         LUGGAGE       HANDBAGS & OTHER PERSONAL LEATHER GOODS       46       3       3       3         LEATHER GOODS N.E.C.       34       3       3       3         LEATHER & LEATHER PRODUCTS       216       25       19       4       2	307		777	81	61	19		1		
LEATHER TANNING & FINISHING  INDUSTRIAL LEATHER BELTING & PACKING  BOOT & SHUE CUT STOCK & FINDINGS  LEATHER GLOVES & MITTENS  LEATHER GOODS N.E.C.  LEATHER & LEATHER PRODUCTS  216 25 19 4	300	RUBBER & MISC. PLASTICS	602	130	87	36	e	4		
INDUSTRIAL LEATHER BELTING & PACKING  BOOT & SHUE CUT STOCK & FINDINGS  FOOTWEAR, EXCEPT RUBBER  FOOTWEAR, EXCEPT RUBBER  LEATHER GLOVES & MITTENS  LUGGAGE  HANDBAGS & OTHER PERSONAL LEATHER GOODS  LEATHER GOODS N.E.C.  LEATHER & LEATHER PRODUCTS  216  25  19  44	311		17	7	4	1	2			
BOOT & SHUE CUT STOCK & FINDINGS8FOOTWEAR, EXCEPT RUBBER57752LEATHER GLOVES & MITTENS14333LUGGAGE32211HANDBAGS & OTHER PERSONAL LEATHER GOODS4633LEATHER GOODS N.E.C.3433LEATHER & LEATHER PRODUCTS21625194	312	INDUSTRIAL LEATHER	60							
FOOTWEAR, EXCEPT RUBBER  LEATHER GLOVES & MITTENS  LUGGAGE  HANDBAGS & OTHER PERSONAL LEATHER GOODS  LEATHER GOODS N.E.C.  LEATHER & LEATHER PRODUCTS  216  25  14  3  3  1  1  1  1  1  1  1  1  1  1  1	313	BOOT & SHUE CUT STOCK &	ac							
LUGGAGE  HANDBAGS & OTHER PERSONAL LEATHER GOODS  LEATHER GOODS N.E.C.  LEATHER & LEATHER PRODUCTS  23 3 3  LEATHER & LEATHER PRODUCTS  216 25 19 4	314		57	7	5	2				
LUGGAGE HANDBAGS & OTHER PERSONAL LEATHER GOODS LEATHER GOODS N.E.C.  LEATHER & LEATHER PRODUCTS  22 1 1 1 3 3 3 4 46 3 3 3 4 49 4	315		14	m	m					
HANDBAGS & OTHER PERSONAL LEATHER GOODS 46 3 3 3 LEATHER GOODS N.E.C. 34 3 3 LEATHER & LEATHER PRODUCTS 216 25 19 4	316		32	2	H	1				
LEATHER GOODS N.E.C.  LEATHER & LEATHER PRODUCTS  216  25  19  4	317	HANDBAGS & OTHER PERSONAL LEATHER	46	m	6					
LEATHER & LEATHER PRODUCTS 216 25 19 4	319		34	e	6					
	310	LEATHER	216	25	19	7	2			

RANGE OF AVERAGE ANNUAL WATER USE WITHIN INDUSTRY GROUPS 1957 - 1959
(MILLIONS OF CUBIC FEET)

					Plants Rep	Plants Reporting Water Intake	Intake		
012		Number of			Grass Intak	e in millians	Grass Intake in millians of cubic feet per year	per year	
Code	Industry Graup	Plants	Totol	less than 0.1	0.1 - 1	1 - 10	10 - 100	100 - 1000	over 1000
321	FLAT GLASS	er.	ĸ	1	2				
322	GLASS & GLASSWARE, PRESSED OR BLOWN	50	16	9	2	9	2		
323	GLASS PRODUCTS MADE OF PURCHASED GLASS	98	16	13	m				
324	HYDRAULIC CEMENT	32	13	2	-	2	ω		
325	STRUCTURAL CLAY PRODUCTS	86	<b>5</b>	17	18	80	7		
326	POTTERY & RELATED PRODUCTS	236	50	38	80	4			
327	CONCRETE GYPSUM & PLASTER PRODUCTS	421	162	7.7	57	13	15		
328	CUT STONE & STONE PRODUCTS	41	13	Ф	S.				
329	ABRASIVES ASBESTOS & MISC MINERAL PRDCTS	155	45	54	6	60	4		
320	STONE CLAY & GLASS PRODUCTS	1110	362	186	105	41	30		
331	BLAST FURNACES, STEEL WORKS & RLLNG MILLS	80	29	12	М	11	2	н	
332	IRON & STEEL FOUNDRIES	115	55	21	15	7	1		
333	PRIMARY SMELTING & REFINING, NONFERROUS	80	М	2		1			
334	SECONDARY SMELTING & REFINING, NONFRRS	28	13	4	9	60			
335	ROLLING, DRAWING, ETC. NONFERROUS METALS	77	52	9	Φ	9	4		
336	NONFERROUS FOUNDRIES	261	80	58	20	2			
339	MISC. PRIMARY METAL INDUSTRIES	114	41	17	19	5			
330	PRIMARY METAL INDUSTRIES	683	235	120	72	35	7	м	
341	METAL CANS	77	23	4	10	6			
342	CUTLERY, HAND TOOLS, & GEN. HARDWARE	245	4 8	32	11	7	1		
343	HEATING & PLUMBING FIXTURES	116	23	12	7	4			
344	FABRICATED STRUCT. METAL PRODUCTS	876	153	117	28	7	1		
345	SCREW MACHINE PRODUCTS & BOLTS, NUTS, ETC.	204	41	33	4	e.	1		
346	METAL STAMPINGS	198	41	33	e.	e.	2		
347	CDATING, ENGRAVING, & ALLIED SERVICES	616	129	99	50	19	4		

TABLE 1 (CONTINUED)

RANGE OF AVERAGE ANNUAL WATER USE WITHIN INDUSTRY GROUPS
1957 - 1959
(MILLIONS OF CUBIC FEET)

TAB	LE 1																									
	over 1000																									
per year	100 - 1000								1					1											1	
Grass Intake in millions of cubic feet per year	10 - 100			6						1	1	1		ю			2			4			9	S	10	
Grass Intake in millions of cut	1 – 10	1	4	54	1	1	6		9	2	m	7	1	21	2	n	ζ.	1	6	9	60	2	30	9	27	5
Grass Intak	0.1 1	6	9	128	2	n	21	12	12	17	2	2	14	85	13	10	4	9	9	15	14	7	75	11	24	7
	less than 0.1	19	37	343	e	37	77 7	81	47	69	7	21	207	909	39	15	80	27	7	18	87	10	172	58	92	23
	Tatal	58	47	534	9	41	89	66	99	62	13	28	222	616	54	28	19	34	16	43	70	19	283	77	154	32
Number of	Plants	721	259	2804	56	156	544	601	259	338	54	133	1766	3577	168	66	75	216	137	177	368	100	1340	345	781	248
Industry Graup	dono Alisonii	MISC. FABRICATED WIRE PRODUCTS	MISC. FABRICATED METAL PRODUCTS	FABRICATED METAL PRODUCTS. EXCPT. ORDN. ETC	ENGINES & TURBINES	FARM MACHINERY & EQUIPMENT	CONSTRUCTION, MINING, ETC. EQUIPMENT	METALWORKING MACHINERY & EQUIPMENT	SPECIAL INDUSTRY MACHINERY	GENERAL INDUSTRIAL MACHNRY & EQUIPMENT	OFFICE, CMPUTNG, & ACCNTG MACHINES	SERVICE INDUSTRY MACHINES	MISC. MACHNRY EXCEPT ELECTRICAL	MACHINERY, EXCEPT ELECTRICAL	ELECTRIC TRNSMSSN & DSTRBTN EQUIPMENT	ELECTRICAL INDUSTRIAL APPARATUS	HOUSEHOLD APPLIANCES	ELECTRIC LGHTNG & WRNG EQUIPMENT	RADIO & TV RECVNG SETS EXCPT COMM.TYPES	COMMUNICATION EQUIPMENT	ELECTRONIC COMPONENTS & ACCESSORIES	MISC.ELEC. MACHNRY, EOPMNT & SUPPLIES	ELECTRICAL MACHNRY, EOPMNT & SUPPLIES	MOTOR VEHICLES & VEHICLE EQUIPMENT	AIRCRAFT & PARTS	SHIP & BOAT BUILDING & REPAIRING
												358								366		369	360	371	372	373

RANGE OF AVERAGE ANNUAL WATER USE WITHIN INDUSTRY GROUPS 1957 - 1959 (MILLIONS OF CHRIC FEFT)

IABÉE : (COIT) moch

_	_																									
		over 1000																					2			
		100 - 1000	-			-																	27			
						15												7		-		2	258	_		
	ner Infoke	10 -				35	1		1	-		_		4	•	-	-	-	7		-	-5-	617			
A	Sorting Wo	1 - 10																					•			
0 10	Cane Intole in millions of cut	0,1 1 1 1 - 10 10 - 100		1	7	41	9	'n	1	e.	-	7		20			6	4	3	3	9	25	1222			
		less than 0.1			12	185	20	20	4	92	5	14		89	6	6	52	14	4	54	43	122	3143			
(		Total		1	13	277	27	56	9	30	9	18		113	σ	7	35	20	∞	28	20	154	5269			
(MICEIGNS OF COBIC FEET)	Number of	Plonts	2	7	97	1480	80	112	40	157	64	76	10	545	140	27	277	91	79	144	405	1163	27275			
(WIC		Industry Group	RAILROAD EQUIPMENT	MOTORCYCLES BICYCLES & PARTS	MISC TRANSPORTATION EQUIPMENT	TRANSPORTATION EQUIPMENT	ENGNRNG.LAB.6 SCNTFC & RSRCH INSTRMNTS	INSTRMNTS, MEASURING, RECORDING, CNTRLNG	OPTICAL INSTRUMENTS & LENSES	SURGICAL, MEDICAL INSTUMNTS & SUPPLIES	OPHTHALMIC GOODS	PHOTO EQUIPMENT & SUPPLIES	WATCHES, CLOCKS, ETC. & PARTS	SCIENTIFIC INSTRUMENTS ETC.	JEWELRY, SILVERWARE & PLATED WARE	MUSICAL INSTRUMENTS & PARTS	TOYS, AMUSEMENT, SPORTING & ATHLETIC GOODS	PENS, PENCILS, OFFICE & ARTISTS SUPPLIES	COSTUME JEWELRY ETC. EXCPT PRECIOUS METAL	MISC. MANUFACTURING INDUSTRIES	MISC. MANUFACTURING INDUSTRIES	MISC. MANUFACTURING INDUSTRIES	TOTAL ALL MANUFACTURES		1	
-		S.I.C. Cade	374	375	379	370	381	382	383	384	385	386	387	380	391	393	394	395	396	398	399	390				

AVERAGE ANNUAL WATER INTAKE BY INDUSTRY GROUP 1957 - 1959

TABLE 2

		בט) בט	(CUBIC FEET)		DC	
<u>'</u>		New A Disease	Fresh Water			Tatal
Code	Industry Group	Reporting	Public Water System	Campany Water System	Brackish Water	Water Intake
201	MEAT PRODUCTS	111	283,238,681	181.064.757	10.845.645	472 • 147 • 283
202	DAIRY PRODUCTS	116	155,240,629	505.061.792	18.766.666	759.075.287
203	CANNING & PRESERVING FRUITS ETC.	256	632,614,758	1.118.314.711	1.385.609.218	3.136.538.887
204	GRAIN MILL PRODUCTS	81	36,654,889	33.853.761	15,715,486	86,224,136
205	BAKERY PRODUCTS	77	36.798.522			36.798.322
206	SUGAR	11	138,4,13,755	1.044.100.759	659,936,343	1,842,441,037
207	CONFECTIONERY & RELATED PRODUCTS	38	12,298,110	5,867,408		18,165,518
208	BEVERAGE INDUSTRIES	148	245,167,271	391,204		598,558.775
209	MISCELLANEOUS FOOD PREPARATIONS ETC.	170	206,827,979	165,451,833	90•136•900	462,416,708
20c	FUOD AND KINDRED PRODUCTS	1008	1.744,249.270	3,447,166,425	2.181.010.258	7,412,365,953
223	BROAD WOVEN FABRICS, WOOL	4	3,230,505			3,230,505
225	KNITTING MILLS	ī.	356,601			396.601
220	UYEING & FINISHING TEXTILES EXCEPT WOOL	7	0.4662.155			6.862,156
227	7 FLOJR COVERING MILLS	7	2.139.133			2,739,733
229	9 MISCELLANEOUS TEXTILE GOODS	10	3.544.577			3.544.577
220	220 TEXFILE MILL PRODUCTS	33	16.773.572			16.773.572
232	MENS & BGYS FURNISHINGS ETC.	15	1.066.817			1.066.817
233	WGMENS MISSES & JRS OUTERWEAR	4.1	2.542.179	30.000		2,572,179
236	6 GIRLS CHILDRENS & INFANTS OUTERWEAR	4	844895			84 • 893
238	MISC. APPAREL & ACCESSORIES	е	161,497			161,497
239	9 MISC. FABRICATED TEXTILE PRODUCTS	38	2.295.534			2,295,534
230	APPAREL & OTHER PRODUCTS ETC.	101	6.150.920	30,000		6.180.920
241	LOGGING CAMPS & CONTRACTORS	28	16,512,329	22,117,431		38.631,760
242	SAYMILLS & PLANING MILLS	148	160,491,108	1.010.405.606	13,368,055	1,857,324,849
243	3 MILLWORK VENEER PLYWOGD ETC.	101	5.2001.203	108.714.772	125+185+520	259+304+515
J						

AVERAGE ANNUAL WATER INTAKE BY INDUSTRY GROUP
1957 - 1959
(CUBIC FEET)

			(CUBIC FEET)			Teres
S.I.C.		No. of Plants	Fresh Water	Water	Brookish Woter	Water
Cade	Industry Graup	Reparting	Mater System	Water System	Drockish marer	Intake
			0.17	3.23 KK. 114		7,187,907
544	WOODEN CONTAINERS	7.1	00110101	21100310		
546	MISC. WOOD PRODUCTS	4.5	4,666,041	11,690,825	2,600,000	18,950,866
240	24- LUMBER & WOLD PRODUCTS EXCEPT FURNITURE	343	195,765,469	1.824,480,853	141,153,575	2 • 161 • 399 • 897
251	HOUSEHOLD FURNITURE	101	7.539,117	69,178		7,608,295
252	OFFICE FURNITURE	00	1.497,224			7,497,224
253	PUBLIC BUILDING & RFLATED FURNITURE	m	169,400			169,400
254	PARTITIONS ETC, OFFICE & STORE FIXTURES	25	826+954			826,954
259	MISC. FURNITURE & FIXTURES	14	518,566			518,566
250	FURNITURE & FIXTURES	151	16.551,261	69,178		16.620.439
262	PAPER MILLS EXCEPT BUILDING PAPER MILLS	4	117,017,182	473,236,690	193,836,805	804.090.677
263	B PAPERBOARD MILLS	60	01,275,305	139,427,711	28,833,333	829,536,355
264	CONVERTED PAPER PRODUCTS EXCEPT BOXES	0 7	54,108,547	58,995,302	1,676,354	114.780.203
265	PAPERBOARD CONTAINERS & BOXES	50	24,775,839	101,598,594		126,374,433
26∪	PAPER & ALLIED PRODUCTS	102	257,176,873	1,393,258,303	224,346,492	1,874,781,668
271	NEWSPAPERS PUBLISHING & PRINTING	74	152,048,532	22,092,233		174,140,765
273	BOOKS	5	123,590			123,590
274	274 MISC. PUBLISHING	4	189,057			189.037
275	COMMERCIAL PRINTING	150	8,299,488			8,299,488
276	MANIFOLD BUSINESS FORMS MFG.	10	1,540,874			1,540,874
278	8 BOOKBINDING & RELATED INDUSTRIES	16	764,168			764.168
279	PRINTING TRADE SERVICE INDUSTRIES	29	3,097,080			3,097,080
270	PRINTING, PUBLISHING & ALLIED INDUSTRIES	288	166, 362, 769	22.092.233		188,155,002
281	INDUSTRIAL INORGANIC & ORGANIC CHEMICALS	95	470,726,523	1,580,826,853	1,525,441,988	3,584,995,364
282	PLASTIC MATERIALS ETC. EXCEPT GLASS	33	309,877,853	3,554,898	828,937,974	1,142,370,725
283	3 DRUGS	0.7	30,457,452	44,802		30.502.254

TABLE 2 (CONTINUED)

AVERAGE ANNUAL WATER INTAKE BY INDUSTRY GROUP 1959 (CUBIC FEET)

		ט	(CUBIC FEET)			
S.I.C.	Industry Group	No. of Plants Reporting	Public	Water Company Wood Surem	Brock ish Water	Water
284	SOAP, DETERGENTS, COSMETICS ETC.	7.1	76,776,154	31,245	000.000.69	169.807.399
285	PAINTS, VARNISHES, LACOUERS, ENAMELS ETC.	70	14,407,629	1,611,474		16.019.103
287	AGRICULTURAL CHEMICALS	47	55,871,638	40,408,593		96,280,231
289	MISC. CHEMICAL PRODUCTS	52	61,847,731	21,623,608	641,666,666	725,138,005
280	CHEMICAL & ALLIED PRODUCTS	408	1,027,964,980	1,648,101,4/3	3,089,046,628	5,765,113,081
291	PETROLEUM REFINING	45	1,995,453,976	872,820,521	9;157,101,539	12,025,876,036
295	PAVING & ROOFING MATERIALS	14	101.970.096	16,042,733	2,500,000	120,512,829
299	MISC. PETROLEUM & COAL PRODUCTS	18	2,968,046	160,260		3,068,306
290	PETROLEUM REFINING & RELATED INDUSTRIES	7.7	2,100,892,118	888,963,514	9,159,601,539	12,149,457,171
301	TIRES & INNER TUBES	6	15,603,151	147,256,858		162,860,009
302	RUBBER FOOTWEAR					
306	FABRICATED RUBBER PRODUCTS N.E.C.	42	8,241,404	7,482,830	2,080	15,726,314
307	MISC PLASTICS PRODUCTS	85	7,896,544	351+338		8,247,882
300	RUBBER & MISC. PLASTICS PRODUCTS	136	31,741,099	155,091,026	2.080	186,834,205
311	LEATHER TANNING & FINISHING	φ	6,391,294	1,179,062		7,570,356
314	FOOTWEAR, EXCEPT RUBBER	7	312,815			312,815
315	LEATHER GLOVES & MITTENS	8	15,700			15.700
317	HANDBAGS & OTHER PERSONAL LEATHER GOODS	m	42,200			42,200
319	LEATHER GOODS N.E.C.	6	17,880			17,880
310	LEATHER & LEATHER PRODUCTS	54	6.179.889	1,179,062		7,958,951
321	FLAT GLASS	3	447,563	42,735		490.298
322	GLASS & GLASSWARE, PRESSED OR BLOWN	17	62,015,197	10.000.000		72.015.197
323	GLASS PRODUCTS MADE OF PURCHASED GLASS	16	176.617	562.126		1,338,743
324	HYDRAULIC CEMENT	11	634,234	261,469,092	351,361,293	613,464,619
325	325 STRUCTURAL CLAY PRODUCTS	43	32,328,119	1,760,310		34,688,429
				l	l	

AVERAGE ANNUAL WATER INTAKE BY INDUSTRY GROUP 1957 - 1959 ICLIBIC FFET)

TABLE 2 (CONTINUED)

		(CU	(CUBIC FEET)			
		No of Plants	Fresh Water	ш		Tatal
Code	Industry Group	Reparting	Public Water System	Company Water System	Brackish Water	Mater Intake
326	POTIERY & RELATED PRODUCTS	64	13,417,533	5,134,260		18.551.793
327	CONCRETE GYPSUM & PLASTER PRODUCTS	161	113,872,254	419,463,864	6,461,227	539,797,345
328	CUT STONE & STONE PRODUCTS	12	1,746,868	75,529		1.862.397
376	ABRASIVES ASBESTOS & MISC MINERAL PRDCTS	7 7	06.032.164	137,760,382	14,838,541	218.631.687
320	STONE CLAY & GLASS PRODUCTS	356	291,911,149	836,208,278	372.661.061	1.500.840.508
331	BLAST FURNACES, STEEL WORKS & RLLNG MILLS	26	193,346,762	206.594.467		399.941.229
332	IRON & STEEL FOUNDRIES	77	37,474,480	5,675,709		43.150.589
334	SECONDARY SMELTING & REFINING, NONFRRS	11	10,354,987		1,604,166	11,959,153
335	S ROLLING, DRAWING, ETC. NONFERROUS METALS	26	85,294,537	4,164.446		89,458,983
336	NONFERROUS FOUNDRIES	82	9,604,412	962.789		10.567,201
339	9 MISC. PRIMARY METAL INDUSTRIES	04	16,706,826	130,339		16.837,164
330	PRIMARY METAL, INDUSTRIES	529	352,782,404	217.527.149	1.604.166	571.914.319
341	METAL CANS	21	31.946.905	183,810		32,124,715
345	CUTLERY, HAND TOOLS, & GEN. HARDWARE	47	37,533,928			37,533,928
343	HEATING & PLUMBING FIXTURES	54	24,170,783			24.770.783
344	4 FABRICATED STRUCT. METAL PRODUCTS	154	54.974.148	3.942.085		58.916.233
345	SCREW MACHINE PRODUCTS & BOLTS.NUTS.ETC.	77	55.088.845	476.765		55,565,810
346	6 METAL STAMPINGS	07	24.874.533	4.290.000		29,164,533
347	7 COATING, ENGRAVING, & ALLIED SERVICES	131	173.637.410	375,569		174+012+979
348	8 MISC. FABRICATED WIRE PRODUCTS	28	8,331,092			8,331,092
346	349 MISC. FABRICATED METAL PRODUCTS	47	8,521,230	868		8.522.098
340	O FABRICATED METAL PRODUCTS. EXCPT. ORDN. ETC	538	419.672.874	9.269.297		428.942.171
351	1 ENGINES & TURBINES	2	1,830,972	5,446,278		7.277.250
352	2 FARM MACHINERY & EQUIPMENT	04	4,044,039	242,437		4.286.476
353	3 CONSTRUCTION, MINING, ETC. EQUIPMENT	68	14,633,158	7.438,877		22.072.035

AVERAGE ANNUAL WATER INTAKE BY INDUSTRY GROUP
1957 - 1959
(CUBIC FEET)

TABLE 2

13.665.358 24.348.799 40.297.698 13.096.706 57,241,129 16,445,574 4.671.583 81,424,923 38,071,088 387,173,055 529,089,240 1,025,960 5.15 .436 46.752.422 13,265,122 109,122,133 8,521,162 10,278,382 26,146,371 18.230.281 10,456,531 228,717,524 715,031 3,435,783 32,079,021 Tatal Water Intake 009.89 Brackish Water 9,736,527 9.805.127 23,333 29,307,770 250,160 11,618,142 13,156,184 23,017,537 54,710 61,046,885 2,967,971 152,306 796 3,121,239 12,438,975 3,640,567 2,169,667 49,187 11,058,561 Water System Company Fresh Water 5,127,103 5,387,013 4,071,583 387,020,749 13,616,171 14,528,229 11,192,615 17,280,161 13,941,796 76,194,244 34,313,447 81,424,923 34,430,521 11,095,455 93,400,154 .06,085,562 22,341,532 516,162,874 8,521,162 10,278,382 1,025,960 3,185,623 18,230,281 10,456,531 715,031 Water System Public Na. of Plants Reporting 619 286 266 66 149 92 82 13 229 14 33 16 45 15 30 26 23 30 31 54 31 7.1 22 12 RADIO & TV RECVNG SETS EXCPT COMM.TYPES ENGNRNG. LAB. & SCNTFC & RSRCH INSTRMNTS SENERAL INDUSTRIAL MACHNRY & EQUIPMENT NSTRMNTS, MEASURING, RECORDING, CNTRLNG ELECTRIC TRNSMSSN & DSTRBIN EQUIPMENT SURGICAL + MEDICAL INSTUMNTS & SUPPLIES ISC.ELEC. MACHNRY, EOPMNT & SUPPLIES ELECTRICAL MACHNRY, EOPMNT & SUPPLIES LECTRONIC COMPONENTS & ACCESSORIES 354 METALWORKING MACHINERY & EQUIPMENT NOTOR VEHICLES & VEHICLE EQUIPMENT OFFICE, CMPUTNG, & ACCNTG MACHINES ELECTRIC LGHING & WRNG EUUIPMENT HIP & BOAT BUILDING & REPAIRING IISC. MACHNRY EXCEPT ELECTRICAL ELECTRICAL INDUSTRIAL APPARATUS ISC TRANSPORTATION EQUIPMENT PTICAL INSTRUMENTS & LENSES MACHINERY, EXCEPT ELECTRICAL SPECIAL INDUSTRY MACHINERY Industry Group SERVICE INDUSTRY MACHINES RANSPORTATION EQUIPMENT COMMUNICATION EQUIPMENT HOUSEHOLD APPLIANCES IRCRAFT & PARTS 356 S.I.C. Code 357 359 350 361 362 363 364 365 366 367 369 360 373 379 370 381 382 383 384 371 372

TABLE 2 (CONTINUED)

AVERAGE ANNUAL WATER INTAKE BY INDUSTRY GROUP
(CUBIC FEET)

No. of the color   No. of the			3	(CUBIC FEE!)			
Main System   Work System   Work System   Work System   Work System   Work System   Walfels Cooperation   1	S.I.C.		No. of Plants	Public		Brackish Water	Woter
######################################	Code		Keparting	Water System	Water System		Intake
#ATCHES.CLOCKS.ETC. 6 PARTS  SCIENTIFIC INSTRUMENTS ETC.  106 24.946.251 250.166  4 23.527 334  MUSICAL INSTRUMENTS ETC.  106 24.946.251 250.166  4 1.068.879  1075.4MUSEMENT.SPORTING 6 ATHLETIC GOODS  20.069.889  1075.4MUSEMENT.SPORTING 6 ATHLETIC GOODS  1075.4MUSEMENT.SPORTING 6 ATHLETIC GOODS  1075.4MUSEMENT.SPORTING 100USTRIES  1075.4MUSEMENT.SPORTING 100USTRIES  1076.4MUSEMENT.SPORTING 100USTRIES  1076.4MUSEMENT.SPORTI	385		'n	152,006			152.006
SCIENTIFIC INSTRUMENTS ETC.  106 24,946.251 250.166 423.527  1075.4MUSICAL INSTRUMENTS ETC.  10 423.527  4 1268.875  1075.4MUSICAL INSTRUMENTS ETC.  10 423.527  11.688.875  1075.4MUSICAL INSTRUMENTS & PARTIS SUPPLIES  10 2.406.988  10.455.708  11.696.988  11.455.708  11.184  11.184  11.1820  12.406.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  11.046.599  12.42.842  11.1820  11.1820  12.42.842	386	PHOTO EQUIPMENT & SUPPLIES	16	1,783,118			1,783,118
106   24+946+251   250+166   107   108   24+946+251   108	387	WATCHES, CLOCKS, ETC. 6 PARTS					
MUSICAL INSTRUMENTS 6 PARTS  MUSICAL INSTRUMENTS 6 PARTS  TOYS.AMUSEMENT.SPORTING 6 ATHLETIC GOODS  TOYORAL STATES SUPPLIES  TOYORAL STATES SUPPLIES  TOTAL ALL MANUFACTURES BY ACRE FEET  TOTAL ALL MANUFACTURE	380	SCIENTIFIC INSTRUMENTS ETC.	106	24.946.251	250,166		25,196,411
1075.AMUSEMENTS 6 PARTS 1075.AMUSEMENT.SPORTING 6 ATHLETIC GOODS 10.2.v66.988 159.881 159.881 17.184 17.484.473.220 17.484.473.220 17.484.473.220 17.484.473.220 17.484.473.220 17.484.467 1017AL ALL MANUFACTURES BY ACRE FEET 1017AL AL	391	JEWELRY, SILVERWARE & PLATED W	10	423,527			423.527
1075.#MUSEMENT.SPORTING & ATHLETIC GOODS 32 4.++90.142 334 PERS.PERCILS.OFFICE & ARTISTS SUPPLIES 19 2.066+988 159-881	393	MUSICAL INSTRUMENTS & PARTS	7	1,068,875			1,068,875
COSTUME JEWELRY ETC. EXCPT PRECIOUS METAL  OSTUME JEWELRY ETC. EXCPT PRECIOUS METAL  MISC. MANUFACTURING INDUSTRIES  150 13.285.450 1.0485599  TOTAL ALL MANUFACTURES BY ACRE FEET  5221 7.484.473.220 1.4578.212.064 15.179.230.926  TOTAL ALL MANUFACTURES BY ACRE FEET  5221 7.484.473.220 1.4578.212.064 15.179.230.926  348.467	394	TOYS, AMUSEMENT, SPORTING & ATHLETIC GOODS	32	4,490,142	334		4,490,476
### ##################################	395	PENS, PENCILS, OFFICE & ARTISTS	19	2,066,988			2,066,988
MISC. MANUFACTURING INDUSTRIES 49 2.922.634 871.206 MISC. MANUFACTURING INDUSTRIES 150 13.285.450 10.078.599 10.178.212.064 10.179.230.926 10.178.212.064 10.179.230.926 10.178.212.064 10.179.230.926 10.178.212.064 10.179.230.926	396	COSTUME JEWELRY ETC. EXCPT PRECIOUS METAL	6	1,455,708	159,861		1,615,589
MISC. MANUFACTURING INDUSTRIES  MISC. MANUFACTURING INDUSTRIES  MISC. MANUFACTURES  MI	398	MISC. MANUFACTURING INDUSTRIES	27	857+576	17,184		874.760
FEET 5221 7,484,473,220 10,578,212,064 15,179,230,926  FEET 5221 171,820 242,842 348,467	399	MISC. MANUFACTURING INDUSTRIES	67	2.922.634	871.200		3,793,834
BY ACRE FEET 5221 7,484,473,220 10,578,212,064 15,179,230,926  BY ACRE FEET 5221 171,820 242,842 348,467	390	MISC. MANUFACTURING INDUSTRIES	150	13,285,450	1,048,599		14,334,049
ALL MANUFACTURES BY ACRE FEET 5221 171.82U 242.842 348.467		TOTAL ALL MANUFACTURES	5221	7,484,473,220	10,578,212,064	15,179,230,926	33,241,916,210
		ALL MANUFACTURES BY ACRE	5221	171,820	242,842	348•467	763,129
		ALL MANUTALIONES OF ACRES	7776		7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		

AVERAGE ANNUAL WATER INTAKE BY COUNTY 1957 - 1959 (CUBIC FEET)

TABLE 3

		SO)	(CUBIC FEET)			
Code	County	No. of Plants Reporting	Public Water System	Company Water System	Brackish Water	Water Mater Intoke
						P C
m	AMADOR	10	30,211,700	10,585,505		507161404
4	BUITE	28	6,573,120	185,146,524		191.719.644
2	CALAVERAS	•	14,877,406	4,436,044		19,313,450
9	COLUSA	4	163,688	40,104		203,792
7	CONTRA COSTA	76	1,793,845,016	1,952,421,753	8,046,146,003	11.792.412.772
00		18	422,614	12,386,999	585,520	13,395,133
6	EL DORADO	10	16,907,441	7,425,039		24,332,480
10	FRESNO	122	113,806,490	346,295,865		460,102,355
11	GLENN	10	338,630	90,170,558		90.509.188
12	HUMBOLDT	61	83,096,682	112,468,144	151,401,388	346,966,214
13	IMPERIAL	17	121,855,673	17,590,693		139,446,366
14	INYO	9	4,010	76,044,622	18,443,906	94,492,538
15	KERN	59	80,830,451	237,922,348		318,752,799
16		14	6,725,109	18,540,968		25,266,077
17	LAKE	4	065,199	6,398,496		6,463,695
18	LASSEN	9	1,685,152	183,109,180		184.794.332
20	MADERA	14	492,431	83,074,264	,	83,566,695
21	AARIN	28	7,320,187	1,501,608		8,821,795
23	MENDOCINO	26	2,035,248	229.781.427		231+816+675
54	MERCED	18	3,354,963	176,954,943		180+309+906
25	MODOC	4	200,520	20,428,794		20,629,314
27	MONTEREY	45	7,695,061	316,076,488	1,019,579,954	1,343,351,503
28	NAPA	21	13,033,275	448,558		13,481,833
58	NEVADA	15	18,278,453	10,854,503		29 • 132 • 956
30	ORANGE	104	271,371,145	93,622,694	404,247	365,398,086

AVERAGE ANNUAL WATER INTAKE BY COUNTY TABLE 3 (CONTINUED)

		(CUI	(CUBIC FEET)			
		No. of Plants	Fresh Water		:	Total
Code	County	Reporting	Public Water System	Vater System	Brackish Water	Water Intake
31	PLACER	10	7,844,687	14,664,278		22,508,965
32	PLUMAS	7	1,229,345	334,379,208		335,608,553
33	RIVERSIDE	54	75,501,083	194,354,225		269,855,308
34	SACRAMENTO	57	64,245,276	463,389,086		527,634,362
35	SAN BENITO	7	348,631	29,706,559		30,055,190
36	SAN BERNARDINO	88	203,409,087	319,885,695	213,213,684	736,508,466
39	SAN JOAQUIN	46	138,779,436	811,465,881	2,711,400	952,956,717
40	SAN LUIS OBISPO	10	2,904,691	39,687,379		42,592,070
41	SAN MATEO	165	153,090,539	20,705,658	429,884,356	603,680,553
42	SANTA BARBARA	36	3,924,143	312,360,304		316,284,447
43	SANTA CLARA	255	151,010,512	374,892,645	3,565	525,906,722
5 5	SANTA CRUZ	37	11,311,642	78,340,740		89,652,382
45	SHASTA	21	3,108,891	400,889,862		403,998,753
47	SISKIYOU	16	1,585,559	416,096,704		417,682,263
8 4	SOLANO	13	19,744,064	250,738		19,994,802
64	SONOMA	74	8,425,325	87.047.277	5,333,333	100,805,935
20	STANISLAUS	52	124,260,940	345,168,299		469,429,239
51	SUTTER	10	4,851,131	9.720.976		14.572.107
52	ТЕНАМА	15	3,691,291	3,504,532		7.195.823
53	TRINITY	•		27,381,489		27,381,489
54	TULARE	9 7	19,869,056	67,981,428	169,916	88,020,400
55	TUOLUMNE	10	46.016.436	260,912		46.277.348
99	VENTÜRA	23	38,930,214	27,297,384		66.227.598
57	YOLO	11	924•459	221,150,640		222.075.099 IA
8	YUB <b>A</b>	4	35,000	117,905		152,905

TABLE 3 (CONTINUED)

AVERAGE ANNUAL WATER INTAKE BY COUNTY
1957 - 1959
(CUBIC FEET)

		100	(COBIC FEET)	3			
Code	County	No. of Plants Reporting	Public Water System	Campany Water System	Brackish Water	Total Water Intake	TABLE
09	ALAMEDA	487	487,103,048	417,034,312	755,373,367	1,659,510,727	3
70		5309	2,863,216,051	1,487,530,513	4,583,137,256	8,933,883,820	
80	SAN FRANCISCO	399	307,381,441	15,585,882	15,684,027	338,651,350	
90	SAN DIEGO	133	159,672,689	1,786,710	75,000	161,534,399	
	ALL COUNTIES	5247	7,497,604,331	10,716,363,342	15,242,146,922	33,456,114,595	
	ALL COUNTIES BY ACRE FEET	5247	172,121	246,014	349,912	768,047	

AVERAGE ANNUAL WATER USE BY INDUSTRY GROUP
1957 - 1959
(MILLIONS OF CUBIC FEET)

		(MILLIONS OF CUBIC FEET)	OF CUBIC F	EET)								
				**	Woter Intoke			Water	Water	Water 7	Water Treated .	
S.I.C. Code	Standard Industrial Classification Industry Group	Number of plants reporting	Caoling	Pro- cessing	Boiler Feed	Sanitary and Misc.	Total	recircu- lated All pur- poses	without recircula- tion	Prior to use	Prior to dis- chorge	Total dis- charged
201	MEAT PRODUCTS	33	76	85	17	36	232	55	287	93	10	171
202	DAIRY PRODUCTS	20	150	114	19	231	514	104	618	34	60	351
203	CANNING PRESERVING FRUITS ETC.	127	347	617	107	141	1212	1915	3127	336	161	754
504	GRAIN MILL PRODUCTS	31	52	12	n	6	75	9	81	6	er)	27
502	RAKFRY PRODUCTS	56	-	4	1	6	14		14			10
206	SUGAR	9	1006	231	20	50	1307	382	1689	20	43	331
207	CONFECTIONERY RELATED PRODUCTS	12	е	2	1	5	11	420	431			7
208	REVERAGE INDUSTRIES	77	235	199	20	50	504	154	658	22	82	337
503	MISCFLLANEOUS FOOD PREPARATIONS ETC.	74	61	7.7	15	57	210	135	345	64	20	82
200	FOOD AND KINDRED PRODUCTS	436	1949	1341	203	588	4019	3171	7250	578	327	2070
226	DYEING FINISHING TEXTILES EXCEPT WOOL	5		5	-		7		7	'n		9
227	FLOOR COVERING MILLS	5				2	60	1	4			2
220	TEXTILE MILL PRODUCTS	10		2	7	2	10	1	11	2		<b>6</b> 0
233	WOMFNS MISSES JRS OUTFRWEAR	15				1	1		7			-
239	MISC. FARRICATED TEXTILE PRODUCTS	12					1		1			-
230	APPAREL OTHER PRODUCT & FIC.	27					2		2			2
241	LOGGING CAMPS CONTRACTORS	<b>6</b> 0				5	2		'n			2
242	SAWMILLS PLANING MILLS	68	441	147	425	62	1076	510	1586	360	63	295
243	MILLWORK VENEER PLYWOOD ETC.	36	24	28	11	23	85	4	89	10	1	9
244	WOODEN CONTAINERS	11				7	1		1			1
249	MISC. WOOD PRODUCTS	14	6	2	2		13	7	14	7		9
240	LUMBER WOOD PRODUCTS FXCEPT FURNITURE	137	474	177	438	91	1180	515	1695	371	99	313
251	HOUSEHOLD FURNITURE	45				2	2	1	m			2
252	OFFICE FURNITURE	е.	1	4		2	7		7			2
254	PARTITIONS FIC. OFFICE STORE FIXTURES	60										

AVERAGE ANNUAL WATER USE BY INDUSTRY GROUP
1957 - 1959
(MILLIONS OF CURIC FEFT)

		(MILLIONS OF CUBIC FEET)	F CUBIC F	EET)								
				*	Water Intake			Water	Water	Water Treated	reated a	-
S.I.C.	Standard Industrial Classification Industry Group	Number of plants reporting	Cooling	Pra- cessing	Boiler Feed	Sanitary and Misc.	Tatal	recircu- lated All pur- poses	without recircula- tion	Prior ta use	Prior ta dis- charge	lotal dis- charged
259	MISC. FURNITURE FIXTURES	4										
250	FURNITURE FIXTURES	9	1	4		4	6	1	10			4
263	PAPERBOARD MILLS	9	275	520	19	13	827	1228	2055	27	75	339
264	CONVERTED PAPER PRODUCTS EXCEPT BOXES	17	4	95	7	9	111	101	212	6	73	96
265	PAPERBOARD CONTAINERS BOXES	56	4	66	n	18	118	1222	1340	7		66
260	PAPER ALLIED PRODUCTS	64	283	708	56	37	1056	2551	3607	37	148	533
172	NEWSPAPERS PUBLISHING PRINTING	25	16	-	2	82	101	-	102	70		101
275	COMMERCIAL PRINTING	8 7		-		2	4		4			4
276	MANIFOLD BUSINESS FORMS MFG.	9				-	1		7			н
278	ROOKBINDING RELATED INDUSTRIES	М										
279	PRINTING TRADE SERVICE INDUSTRIES	α					1		7			-
270	PRINTING, PUBLISHING ALLIED INDUSTRIES	06	16	2	2	85	107	-	108	70		107
281	INDUSTRIAL INORGANIC ORGANIC CHEMICALS	53	315	207	78	99	999	935	1600	118	82	189
282	PLASTIC MATERIALS ETC. FXCEPT GLASS	19	897	14	125	43	1078	2061	3139	187	198	51
283	DRUGS	15	3	11	2	4	20	2	22	4	-	18
284	SOAP, DETERGENTS, COSMETICS ETC.	28	107	14	20	10	150	293	443	28	2	39
285	PAINTS, VARNISHES, LACONERS, ENAMELS ETC.	33	7	1		2	6	7	16	1		7
287	AGRICULTURAL CHEMICALS	20	59	11	7	7	54	58	112	15		14
289	MISC. CHEMICAL PRODUCTS	22	2	658	1	2	999	<b>α</b>	674	15	13	15
280	CHEMICAL ALLIED PRODUCTS	190	1363	916	233	134	2642	3364	9009	368	596	333
291	PETROLEUM REFINING	23	5538	157	584	91	6969	6088	12457	1414	3196	2938
295	PAVING ROOFING MATERIALS	6	75	12	•	2	96	133	228	60		72
568	MISC. PETROLEUM COAL PRODUCTS	7					1		1			
290	PETROLEUM REFINING RELATED INDUSTRIES	39	5613	169	989	93	6465	6221	12686	1417	3196	3010
301	TIRES INNER TUBES	7	75	1	15	10	102	587	689	15		65

AVERAGE ANNUAL WATER USE BY INDUSTRY GROUP
1957 - 1959
(MILLIONS OF CUBIC FEET)

Pro- cessing         Boiler feed         Sanitory and and masc.         Totol All pur- poses, poses	Boiler Saniory Feed Ali Purched Feed Ansc.  3	Boiler Sonitory Total Little recursor.  3	Boiler Sanitary Feed Feed Misc.  3
Boiler Sonitary Totol All Posts All All All All All All All All All Al	Boiler Sonitory Totol All Poss All Sc.	Boiler Sonitary Totol All Posts All All All All All All All All All Al	Boiler Sonitary Totol All Poss All Seed and Andre.  3
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9	6 1	m	m
25 4 35 1 67 80 3 3 3 3 13 19 6 4 4 4 4 4 4 4 27 20 182 479 17 158 27 6 5 6 5 7 17 25 37 1	4 4 4	4 4 1	4 4 11
4 4 1	4 4 1	4 4 1	4 4 1
BLOWN SED GLASS DUCTS FRAL PRDCTS 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	BLOWN SED GLASS DUCTS PROCTS INONFRRS US METALS	BLOWN SED GLASS DUCTS TRLING MILLS NONFRRS S S	BLOWN SED GLASS DUCTS TRLING MTLLS OS METALS S
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NISHING ODUCTS ODUCTS ODUCTS MISC MIN RODUCTS WORKS ES REFINING	NISHING ODUCTS ODUCTS ODUCTS ODUCTS MISC MIN RODUCTS WORKS ES REFINING NONFERRO	NISHING ODUCTS ODUCTS ODUCTS ASTER PRO ODUCTS WORKS WORKS FEFINING NONFERRO	NISHING DOUCTS ODUCTS ASTER PRO ASTE
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RESSED OR BLOWN OF PURCHASED GLASS UCTS ODUCTS ASTER PRODUCTS MISC MINERAL PRDCTS MODUCTS WORKS RLLNG MILLS ES REFINING, NONFERS NONFERROUS METALS	RESSED OR BLOWN OF PURCHASED GLASS  UCTS  ODUCTS  ASTER PRODUCTS  MISC MINERAL PROCTS  MORKS RLLNG MILLS  ES  NONFERROUS METALS  INDUSTRIES	RESSED OR BLOWN OF PURCHASED GLASS  UCTS  ODUCTS  ASTER PRODUCTS  MISC MINERAL PROCTS  MORKS RLLNG MILLS  ES  REFINING*NONFRRS  NONFERROUS METALS  RIES  11	RESSED OR BLOWN OF PURCHASED GLASS ODUCTS ASTER PRODUCTS MISC MINERAL PRDCTS MODUCTS WORKS RLLNG MILLS ES NONFERROUS METALS INDUSTRIES RIES
OF PURCHASED GLASS  UCTS  ODUCTS  ASTER PRODUCTS  MISC MINERAL PRDCTS  MORKS RLLNG MILLS  ES  NONFERROUS METALS	OF PURCHASED GLASS  UCTS.  ODUCTS.  ASTER PRODUCTS  ASTER PRODUCTS  MISC MINERAL PROCTS  MISC MINERAL PROCTS  INDUCTS  INDUSTRIES  INDUSTRIES	OF PURCHASED GLASS  UCTS  ODUCTS  ASTER PRODUCTS  MISC MINERAL PROCTS  MORKS RLLNG MILLS  ES  WORKS RLLNG MILLS  INDUSTRIES  RIES	OF PURCHASED GLASS  UCTS  ODUCTS  ASTER PRODUCTS  MISC MINERAL PRDCTS  MORKS RLLNG MILLS  ES  REFINING,NONERRS  NONEERROUS METALS  INDUSTRIES  RIES
DCTS  ODUCTS  ASTER PRODUCTS  MISC MINERAL PRDCTS  MODUCTS  WORKS RLLNG MILLS  ES  REFINING*NONFRRS  NONFERROUS METALS	ODUCTS  ASTER PRODUCTS  ODUCTS  MISC MINERAL PROCTS  MORKS RLLNG MILLS  ES  NONFERROUS METALS  INDUSTRIES	DCTS  ODUCTS  ASTER PRODUCTS  MISC MINERAL PRDCTS  MODUCTS  WORKS RLLNG MILLS  ES  NONFERROUS METALS  INDUSTRIES	DCTS  ODUCTS  ASTER PRODUCTS  ODUCTS  MISC MINERAL PRDCTS  INSC MINERAL PRDCTS  MORKS RLLNG MILLS  ES  REFINING,NONERRS  NONFERROUS METALS  INDUSTRIES
DUCTS  ASTER PRODUCTS  ASTER PRODUCTS  MISC MINERAL PRDCTS  RODUCTS  WORKS RLLNG MILLS  ES  REFINING*NONFRRS  NONFERROUS METALS	DCTS ODUCTS ASTER PRODUCTS ODUCTS MISC MINERAL PRDCTS RODUCTS WORKS RLLNG MILLS ES REFINING.NONFRRS NONFERROUS METALS INDUSTRIES	DUCTS  ASTER PRODUCTS  ASTER PRODUCTS  MISC MINERAL PRDCTS  MODUCTS  WORKS RLLNG MILLS  ES  WORKS RLLNG MILLS  INDUSTRIES  REFINING NONFRRS  NONFERROUS METALS  RIEs	DUCTS  ASTER PRODUCTS  ASTER PRODUCTS  MISC MINERAL PROCTS  MORKS RLLNG MILLS  ES  NONFERROUS METALS  INDUSTRIES  RIES
ASTER PRODUCTS 76  ODUCTS 4  MISC MINERAL PRDCTS 27  RODUCTS 182  WORKS RLLNG MILLS 17  ES 27  ES 27  NONFERROUS METALS 5	ASTER PRODUCTS  ASTER PRODUCTS  ODUCTS  MISC MINERAL PRDCTS  27  MORKS RLLNG MILLS  ES  REFINING*NONFRRS  107  NONFERROUS METALS  117  117  117  117	ASTER PRODUCTS  ASTER PRODUCTS  ODUCTS  MISC MINERAL PRDCTS  27  WORKS RLLNG MILLS  137  ES  NONFERROUS METALS  118  INDUSTRIES  121	ASTER PRODUCTS  ASTER PRODUCTS  ODUCTS  MISC MINERAL PRDCTS  27  RODUCTS  WORKS RLLNG MILLS  137  FS  NONFERROUS METALS  117  117  117  118  117  118  119  119
ASTER PRODUCTS  ODUCTS  MISC MINERAL PRDCTS  RODUCTS  WORKS RLLNG MILLS  17  182  4  4  4  4  4  4  4  4  4  4  4  4  4	ASTER PRODUCTS  ODUCTS  MISC MINERAL PRDCTS  27  WORKS RLLNG MILLS  17  18  WORKS RLLNG MILLS  5  NONFERROUS METALS  17  17  18	ASTER PRODUCTS  ODUCTS  MISC MINERAL PRDCTS  RODUCTS  WORKS RLLNG MILLS  137  137  14  44  44  44  44  44  44  44  44  4	ASTER PRODUCTS  ODUCTS  MISC MINERAL PROCTS  RODUCTS  WORKS RLLNG MILLS  117  1182  4 4 4 4 1182  1192  127  137  110  INDUSTRIES  118  INDUSTRIES  121  121  131
MISC MINERAL PRDCTS 27 RODUCTS 182 4 WORKS RLLNG MILLS 17 1 ES 27 REFINING,NONFRRS 5	MISC MINERAL PRDCTS 27 RODUCTS 182 4 WORKS RLLNG MILLS 17 1 ES REFINING,NONERRS 5 NONFERROUS METALS 17 INDUSTRIES 18	MISC MINERAL PRDCTS 27 RODUCTS 182 4 WORKS RLLNG MILLS 17 1 ES REFINING,NONFRRS 5 NONFERROUS METALS 17 RIES 121 1	MISC MINERAL PRDCTS 27 RODUCTS 182 4 WORKS RLLNG MILLS 17 1 ES 27 REFINING,NONFRRS 5 NONFERROUS METALS 17 INDUSTRIES 18 RIES 121 1
MISC MINERAL PRDCTS 27  RODUCTS 182 4  WORKS RLLNG MILLS 17 1  ES  REFINING*NONFRRS 5  NONFERROUS METALS 17	MISC MINERAL PRDCTS 27  RODUCTS 182 4  WORKS RLLNG MILLS 17 1  ES  REFINING*NONFRRS 5  NONFERROUS METALS 17  INDUSTRIES 18	RODUCTS 182 WORKS RLLNG MILLS 17 17 185 WORKS RLLNG MILLS 17 17 11 11 11 11 11 11 11 11 11 11 11	MISC MINERAL PRDCTS 27  RODUCTS 182 4  WORKS RLLNG MILLS 17 1  ES  REFINING,NONERRS 5  NONFERROUS METALS 17  INDUSTRIES 18  RIES 77
WORKS RLLNG MILLS 17 ES 27 REFINING*NONFRS 5 NONFERROUS METALS 17	MORKS RLLNG MILLS 17  ES  REFINING*NONFRS 5  NONFERROUS METALS 17  17  17  18  10005TRIES 18	WORKS RLLNG MILLS 17  ES  REFINING*NONFRS 5  NONFERROUS METALS 17  37  INDUSTRIES 18	WORKS RLLNG MILLS 17 ES ES REFINING*NONFRS 5 NONFERROUS METALS 17 INDUSTRIES 18 RIEs 7
WORKS RLLNG MILLS 17 1 ES REFINING.NONFRRS 5 NONFERROUS METALS 17	WORKS RLLNG MILLS 17 1  ES  REFINING,NONFRRS 5  NONFERROUS METALS 17  1100USTRIES 18	WORKS RLLNG MILLS 17 1  ES  REFINING*NONFRRS 5  NONFERROUS METALS 17  INDUSTRIES 18  RIEs  121 1	FES  REFINING•NONFRRS  NONFERROUS METALS  INDUSTRIES  RIES  17  17  17  18
REFINING•NONFRRS 5 NONFERROUS METALS 17	REFINING, NOWFRRS 5 NOWFERROUS METALS 17 INDUSTRIES 18	REFINING*NONFRRS 5 NONFERROUS METALS 17 INDUSTRIES 18 RIEs 121 1	REFINING.NONFRRS 5 NONFERROUS METALS 17 INDUSTRIES 18 RIEs 121 1
REFINING•NONFRRS 5 NONFERROUS METALS 17	REFINING•NONFRRS 5  NONFERROUS METALS 17  37  INDUSTRIES 18	NONFERROUS METALS 17 37 18 18 18 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	NONFERROUS METALS 17  17  17  17  18  INDUSTRIES 18  RIEs 121
NONFERROUS METALS 17	NONFERROUS METALS 17 37 INDUSTRIES 18	NONFERROUS METALS 17 37 INDUSTRIES 18 RIES 121 1	NONFERROUS METALS 17 37 INDUSTRIES 18 RIEC 121 1
	INDUSTRIES	INDUSTRIES 18	INDUSTRIES 18 121 19
	S	s 18 121 1	ARY METAL INDUSTRIES 18 TAL INDUSTRIES 121 19

# Fresh Water Only

TABLE 4 (CONTINUED)

AVERAGE ANNUAL WATER USE BY INDUSTRY GROUP 1957 - 1959

Standed lindarial Cleanification   Name of Point   Figure   Standed lindarial Cleanification   Cleanificat	T	ABLE 4																									
Number of the property of th		Totol dis- charged	40	20	56	73	2	K	198	6	7	e,	4	14	13	28	80	80	15	9	30	1	1	57	20	•	136
Standard Industrial Classification   Number of part   Pa	reated .	1 0 0		10		α	1		20							1		1						1	2		3
Standed Industrial Classification   Number of part o	Woter 7			-	4				13		1		1					2			1			12		1	14
Standard Industrial Classification   Number of District Care   Standard Industrial Classification   Number of District Care   Number of District C	Water	without recircula- tion	722	31	36	74	2	m	459	4	28	4	4	16	19	30	12	117	15	6	53	-	-		59	6	290
Number of Johns   Number of	Water	recircu- lated All pur- poses	177	10	6	1			238		18			1	-	2	1	23			22			66	δ.	1	127
Standard Industrial Classification   Number of Labita Per   Industry Group   Industrial Classification   Industry Group   I		Total	90	21	27	73	2	en.	221	4	10	4	4	15	18	28	11	46	15	6	31	-	1	74	24	œ	163
Standard Industrial Classification   Number of plants		Sanitary and Misc.	33	E)	2	1	1	7	52	2	4	2	-	7	12	2	9	36	13	20	7			30	14	60	99
Standard Industrial Classification   Number of plants	ater Intak	Bailer Feed	1		2	н			9		1			1				2		1				en .			4
Standard Industrial Classification Industry Group FARRICATED STRUCT. METAL PRODUCTS SCREW MACHINE PRODUCTS METAL STAMPINGS COATING.ENGRAVING. ALLIED SERVICES MISC. FARRICATED WIRE PRODUCTS MISC. FARRICATED WIRE PRODUCTS FARRICATED METAL PRODUCTS FARRICATED FA		Pra-	9	15	22	70	1		134		er)		en.	9	9	25	4	47	pri	1	56	1		27	9	1	99
Standard Industrial Classification Industry Group FARRICATED STRUCT. METAL PRODUCTS SCREW MACHINE PRODUCTS METAL STAMPINGS COATING.ENGRAVING. ALLIED SERVICES MISC. FARRICATED WIRE PRODUCTS MISC. FARRICATED WIRE PRODUCTS FARRICATED METAL PRODUCTS FARRICATED FA	רטפור	Caoling	10	4	1	1		1	29	-	2	-		2		1	-	80	1	2			1	15	3	80	27
Standard Industrial Classification Industry Group FARRICATED STRUCT. METAL PRODUCTS SCREW MACHINE PRODUCTS METAL STAMPINGS COATING.ENGRAVING. ALLIED SERVICES MISC. FARRICATED WIRE PRODUCTS MISC. FARRICATED WIRE PRODUCTS FARRICATED METAL PRODUCTS FARRICATED FA	MICCIONS	Number of plants reporting	09	21	17	67	12	19	235	21	30	38	23	33	7	17	06	259	35	17	60	11	10	28	41	12	162
2.1.C. Col.C. Co		Standard Industrial Classification Industry Group	FARRICATED STRUCT. METAL PRODUCTS		METAL STAMPINGS		MISC. FABRICATED WIRE PRODUCTS	MISC. FABRICATED METAL PRODUCTS	FABRICATED METAL PRODUCTS, EXCPT, ORDN. ETC		CONSTRUCTION, MINING, ETC. FOUIPMENT		SPECIAL INDUSTRY MACHINERY		OFFICE, CMPUTNG, ACCNTG MACHINES	SERVICE INDUSTRY MACHINES	MISC. MACHNRY EXCEPT ELECTRICAL	MACHINERY, EXCEPT ELECTRICAL	ELECTRIC TRNSMSSN DSTRBTN EQUIPMENT	ELECTRICAL INDUSTRIAL APPARATUS	HOUSEHOLD APPLIANCES	ELECTRIC LGHTNG WRNG FOUIPMENT	TV RECVNG SETS	COMMUNICATION EQUIPMENT			ELECTRICAL MACHNRY. EDPMNT SUPPLIES
		S.I.C. Code	344	345	346	347	348	349	340	352	353	354	355	356	357	358	359	350	361	362	363	364	365	366	367	369	360

AVERAGE ANNUAL WATER USE BY INDUSTRY GROUP
1957 - 1959
(MILLIONS OF CUBIC FEET)

IABLE 4 (LON) INCEU!

		(MICLIONS OF CUBIC FEET)	CUBIC						Water			
		Nher		ř	Water Intake			Water	required	Water	Water Treated .	F
Code :	Industry Group	plants	Caoling	Pro- cessing	Bailer Feed	Sanitary and Misc.	Total	loted All pur-	without recircula- tion	Prior to use	Prior to dis- charge	dis- charged
372	AIRCRAFT PARTS	7.0	66	180	7	213	664	173	612	14	13	359
373	SHIP BOAT BUILDING REPAIRING	11	m	13	4	10	30		30	-		6
379	MISC TRANSPORTATION EQUIPMENT	4										
370	TRANSPORTATION EQUIPMENT	117	48	238	13	546	548	219	767	16	37	434
381	ENGNRNG. LAB. SCNTFC RSRCH INSTRMNTS	13					1		7			
382	INSTRMNTS.MEASURING.RECORDING.CNTRLNG	13	1	60		5	6	7	10	-		6
383	OPTICAL INSTRUMENTS LFNSES	5										
384	SURGICAL + MEDICAL INSTUMNTS SUPPLIES	80		2			2		2	2		2
386	PHOTO EQUIPMENT SUPPLIES	60										
380	SCIENTIFIC INSTRUMENTS FTC.	47	-	2		2	12	1	13	9		12
394	TOYS.AMUSEMENT.SPORTING ATHLETIC GOODS	11		7	1	7	3		9		-	2
395	PENS.PENCILS.OFFICE ARTISTS SUPPLIES	6				-	2		2			2
396	COSTUME JEWELRY ETC. EXCPT PRECIOUS METAL	3						-				
398	MISC. MANUFACTURING INDUSTRIES	14					1		~			1
399	MISC. MANUFACTURING INDUSTRIES	17				7	1		~			-
390	MISC. MANUFACTURING INDUSTRIES	54		-	7	60	7		7		7	9
	TOTAL ALL MANUFACTURES	2285	10562	4532	1617	1652	18368	19863	38231	3278	4152	7956
Fre	Fresh Water Only											]

TABLE 5

WEIGHTED AVERAGE ANNUAL UNIT VALUES OF FRESH WATER USE BY INDUSTRY GROUP
1957 - 1959
(CUBIC FEET)

		Stote	Stote wide		Jonts repor	Plants reporting fresh water intake	toke	
S.I.C.	Grace Transcribed	No. of	No. of	No. of	No. of	Unit Volue of Woter Use in cubic feet	of Water	TA
b Bo	door Algorith	Plants	Employees		Employees	Per Employee working doy	Per square foot of plant area	BLE 5
191	GUNS.HOWITZFRS.MORTARS & RELATED EOPMNT							
192	AMMUNITION. EXCPT SMALL ARMS	17	39402					
193	TANKS & TANK COMPONENTS	ı	2317					
194	SIGHTING & FIRE CONTROL EQUIPMENT	2	4818					
195	SMALL ARMS	6	120					
196	SMALL ARMS AMMUNITION	9	39					
199	ORDNANCE & ACCESSORIES N.E.C.	9	67					
190	ORDNANCE AND ACCESSORIES	38	46763					
201	MEAT PRODUCTS	373	19070	63	5588	278	478	
202	DAIRY PRODUCTS	346	21826	8 2	4342	337	1034	
203	CANNING & PRESERVING FRUITS ETC.	585	52205	187	35050	240	325	
204	GRAIN MILL PRODUCTS	232	7407	42	2708	73	136	
205	BAKERY PRODUCTS	309	22405	4 0	6687	17	124	
206	SUGAR	12	4650	10	4156	1300	224	
207	CONFECTIONERY & RELATED PRODUCTS	139	4478	27	1854	32	248	
208	BEVERAGE INDUSTRIES	390	14815	106	4951	372	306	
509	MISCELLANEOUS FOOD PREPARATIONS ETC.	489	14162	114	5695	176	325	
200	FOOD AND KINDRED PRODUCTS	2872	161018	671	70928			
711	CIGARETTES							
212	CIGARS	<b>c</b> c	20					
213	TOBACCO AND SNUFF							
214	TOBACCO STEMMING AND REDRYING	•						
210	TORACCO MANUFACTURES	œ	90					
221	BROAD WOVEN FABRICS. COTTON	2	27					
222	BROAD WOVEN FABRICS. SYNTHETICS & SILK	4	127					
								ŀ

TABLE 5

Per square foa af plant area Unit Value of Water Use in cubic feet Plants reporting fresh water intake ŝ Per Employee warking day Employees No. of No. af Plants 8 7 7 7 œ Employees No. of State wide (CUBIC FEET) No. of Plants LUMBER & WOOD PRODUCTS EXCEPT FURNITURE DYEING & FINISHING TEXTILES EXCEPT WOOL MENS & BOYS SUITS COATS & OVERCOATS GIRLS CHILDRENS & INFANTS OUTERWEAR MISC. FABRICATED TEXTILE PRODUCTS NARROW FABRICS & OTHER SMALLWARES WOMENS MISSES ETC+ UNDERGARMENTS WOMENS MISSES & JRS OUTERWEAR APPAREL & OTHER PRODUCTS ETC. MILLWORK VENEER PLYWOOD ETC. MENS & BOYS FURNISHINGS ETC. MISC. APPAREL & ACCESSORIES LOGGING CAMPS & CONTRACTORS MISCELLANEOUS TEXTILE GOODS SAWMILLS & PLANING MILLS Industry Group BROAD WOVEN FABRICS, WOOL TEXTILE MILL PRODUCTS HATS CAPS 6 MILLINERY FLOOR COVERING MILLS MISC. WOOD PRODUCTS HOUSEHOLD FURNITURE YARN & THREAD MILLS WOODEN CONTAINERS KNITTING MILLS FUR GOODS S.I.C. 

WEIGHTED AVERAGE ANNUAL UNIT VALUES OF FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959

WEIGHTED AVERAGE ANNUAL UNIT VALUES OF FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

Per squore foc of plant area Unit Value of Water Use in cubic feet Plants reporting fresh water intake 1,5 Per Employee working doy Employees ţ ŝ No. of Plants ^ S œ 7.1 No. of Employees No. of Plants PRINTING. PUBLISHING & ALLIED INDUSTRIES INDUSTRIAL INORGANIC & ORGANIC CHEMICALS PARTITIONS ETC. OFFICE & STORE FIXTURES PAPER MILLS EXCEPT BUILDING PAPER MILLS CONVERTED PAPER PRODUCTS EXCEPT BOXES BUILDING PAPER & BUILDING BOARD MILLS PLASTIC MATERIALS ETC. EXCEPT GLASS PUBLIC BUILDING & RELATED FURNITURE PRINTING TRADE SERVICE INDUSTRIES PERIODICALS PUBLISHING & PRINTING NEWSPAPERS PUBLISHING & PRINTING BOOKBINDING & RELATED INDUSTRIES PAPERBOARD CONTAINERS & BOXES MANIFOLD BUSINESS FORMS MFG. GREETING CARD MANUFACTURING MISC. FURNITURE & FIXTURES Industry Group PAPER & ALLIED PRODUCTS FURNITURE & FIXTURES COMMERCIAL PRINTING MISC. PURLISHING OFFICE FURNITURE PAPERBOARD MILLS PULP MILLS 283 INRIIGS BOOKS S.I.C. Code 

WEIGHTED AVERAGE ANNUAL UNIT VALUES OF FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

TABLE 5 Per square for of plant area Unit Value of Woter Use in cubic feet Plants reporting fresh water intake Per Employee 7.1 working doy Employee No. of No. of Plants S Employees No. of No. of Plonts PAINTS, VARNISHES, LACQUERS, ENAMELS ETC PETROLEUM REFINING & RELATED INDUSTRIES HANDBAGS & OTHER PERSONAL LEATHER GOODS INDUSTRIAL LEATHER RELTING & PACKING FABRICATED RUBBER PRODUCTS N.E.C. RUBBER & MISC. PLASTICS PRODUCTS BOOT & SHOE CUT STOCK & FINDINGS SOAP, DETERGENTS, COSMETICS ETC. MISC. PETROLEUM & COAL PRODUCTS LEATHER TANNING & FINISHING PAVING & ROOFING MATFRIALS LEATHER & LEATHER PRODUCTS CHEMICAL & ALLIED PRODUCTS Industry Group LEATHER GLOVES & MITTENS MISC. CHEMICAL PRODUCTS FOOTWEAR . EXCEPT RUBBER AGRICULTURAL CHEMICALS MISC PLASTICS PRODUCTS GUM & WOOD CHEMICALS LEATHER GOODS N.E.C. TIRES & INNER TUBES PETROLEUM REFINING RECLAIMED RUBBER RUBBER FOOTWFAR LUGGAGE S.I.C. Code 

TABLE 5 (CONTINUED)

WEIGHTED AVERAGE ANNUAL UNIT VALUES OF FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

	מחי)	(CUBIC FEET)					-	
S.I.C.		State	State wide	4	Flants reporting		of Water	TAB
Code	Industry Group	Plants	Employees	Plants	ய	Per Employee Per si working day of plan	Per square foot of plant area	LE 5
128	FLAT GLASS	ю	107					
322	GLASS & GLASSWARE, PRESSED OR BLOWN	50	6682	15	4419	41	252	
323	GLASS PRODUCTS MADE OF PURCHASED GLASS	986	1230	11	305	17	74	
324	HYDRAULIC CEMENT	32	5288	12	3383	258	16	
325	STRUCTURAL CLAY PRODUCTS	86	5648	36	3574	38		
326	POTTERY & RELATED PRODUCTS	236	4775	37	1869	37	120	
327	CONCRETE GYPSUM & PLASTER PRODUCTS	421	10405	108	6775	278	er.	
328	CUT STONE & STONE PRODUCTS	41	362	<b>6</b> 0	154	34	104	
329	ABRASIVES ASBESTOS & MISC MINERAL PRDCTS	155	6568	33	3411	113	199	
320	STONE CLAY & GLASS PRODUCTS	1110	41065	260	23890			
331	BLAST FURNACES.STEEL WORKS & RLLNG MILLS	80	19273	27	14622	0.6	·6	
332	IRON & STEEL FOUNDRIES	115	7978	31	2801	8 7	205	
333	PRIMARY SMELTING & REFINING.NONFERROUS	60	612					
334	SECONDARY SMELTING & REFINING.NONFRRS	28	1503	11	489	99	14	
335	ROLLING, DRAWING, ETC. NONFERROUS METALS	7.7	10279	22	6287	51	103	
336	NONFERROUS FOUNDRIES	261	5964	5.1	1620	19	123	
339	MISC. PRIMARY METAL INDUSTRIES	114	3054	30	1300	43	108	
330	PRIMARY METAL INDUSTRIES	683	48663	172	27119			
341	MFTAL CANS	77	8279	18	6741	16	57	
345	CUTLERY, HAND TOOLS, & GEN. HARDWARE	245	10011	34	3973	53	302	
343	HEATING & PLUMBING FIXTURES	116	6681	16	1953	29	137	
344	FABRICATED STRUCT. METAL PRODUCTS	948	30631	89	9051	23	16	
345	SCREW MACHINE PRODUCTS & BOLTS.NUTS.ETC.	204	5536	23	1611	54	207	
346	METAL STAMPINGS	198	6753	30	1937	98	079	
347	COATING, ENGRAVING, & ALLIED SERVICES	616	8181	89	2004	250	1507	

SHIP & BOAT BUILDING & REPAIRING

WEIGHTED AVERAGE ANNUAL UNIT VALUES OF FRESH WATER USE BY INDUSTRY GROUP

TABLE 5 (CUNTINUED)

  Per square fool of plant ored Unit Value of Water Use in cubic feet Plants reporting fresh water intake 4 8 Per Employee working day Employees No. of No. of Plants 2 C No. of Employees .0603 (CUBIC FEET) No. of Plants 1957 - 1959 FABRICATED METAL PRODUCTS, EXCPT, ORDN, ETC RADIO & TV RECVNG SETS EXCPT COMM. TYPES GENERAL INDUSTRIAL MACHNRY & EQUIPMENT ELECTRIC TRNSMSSN & DSTRBIN EQUIPMENT MISC.ELEC. MACHNRY.EOPMNT & SUPPLIES ELECTRICAL MACHNRY, EDPMNT & SUPPLIES ELECTRONIC COMPONENTS & ACCESSORIES METALWORKING MACHINERY & EQUIPMENT MOTOR VEHICLES & VEHICLE FOUIPMENT CONSTRUCTION, MINING, ETC. EQUIPMENT OFFICE, CMPUTNG, & ACCNTG MACHINES ELECTRIC LGHING & WRNG EQUIPMENT MISC. FABRICATED METAL PRODUCTS MISC. MACHNRY EXCEPT ELECTRICAL ELECTRICAL INDUSTRIAL APPARATUS MISC. FABRICATED WIRE PRODUCTS MACHINERY, EXCEPT ELECTRICAL FARM MACHINERY & EQUIPMENT SPECIAL INDUSTRY MACHINERY SERVICE INDUSTRY MACHINES Industry Group COMMUNICATION EQUIPMENT HOUSEHOLD APPLIANCES ENGINES & TURBINES AIRCRAFT & PARTS S.I.C. Code 

WEIGHTED AVERAGE ANNUAL UNIT VALUES OF FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

	TABI	LE 5																							
toke	of Woter ic feet	Per square foot of plont oreo					95	65	86	302		18			66		89	1388	114	1182	7 7				
Plants reporting fresh water intoke	Unit Value of Water Use in cubic feet	Per Employee working doy					11	14	10	23		10			9		6	153	27	175	12				
Plants report	No. of	Employees				181 179634	1758	2513	1848	305		557		1869	99		1255	1622	38	835	533	4349	549246		
	No. of	Plants				181	2.1	18	5	13		10		67	9		13	12	5	20	28	84	3328		
State wide	No. of	Employees	118	169	4212	285588	2605	6196	2525	1956	718	2601	74	22650	1248	465	6009	2205	194	3084	4883	18718	1264659		
State	No. of	Plonts	2	7	16	1480	80	112	04	157	67	76	10	245	140	27	277	91	79	144	405	1163	27275		
		Industry Group	RAILROAD EQUIPMENT	MOTORCYCLES BICYCLES & PARTS	MISC TRANSPORTATION EQUIPMENT	TRANSPORTATION EQUIPMENT	ENGNRNG, LAB, & SCNTFC & RSRCH INSTRMNTS	INSTRMNTS, MEASURING, RECORDING, CNTRLNG	OPTICAL INSTRUMENTS & LENSES	SURGICAL + MEDICAL INSTUMNTS & SUPPLIES	OPHTHALMIC GOODS	PHOTO EQUIPMENT & SUPPLIES	WATCHES, CLOCKS, ETC. & PARTS	SCIENTIFIC INSTRUMENTS ETC.	JEWELRY, SILVERWARE & PLATED WARE	MUSICAL INSTRUMENTS & PARTS	TOYS, AMUSEMENT, SPORTING & ATHLETIC GOODS	PENS, PENCILS, OFFICE & ARTISTS SUPPLIES	COSTUME JEWELRY ETC. EXCPT PRECIOUS METAL	MISC. MANUFACTURING INDUSTRIES	MISC. MANUFACTURING INDUSTRIES	MISC. MANUFACTURING INDUSTRIES	TOTAL ALL MANUFACTURES		
	S.I.C.	900	374	375	379	370	381	382	383	384	385	386	387	380	391	393	394	395	396	398	399	390			

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

I ABLE 0

Poo				000
	Majar Industry Group	Total	Reported	
	AMADOR			
20	FOOD AND KINDRED PRODUCTS	11		530,272
54	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	487	508	15,889,818
25	FURNITURE + FIXTURES	2		3,881
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	8		39,690
59	PETROLEUM REFINING + RELATED INDUSTRIES	93		433,125
32	STONE CLAY + GLASS PRODUCTS	77	92	12,049,299
33	PRIMARY METAL INDUSTRIES	10	6	14,000,000
39	MISC. MANUFACTURING INDUSTRIES	1		2,236
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	591	609	42,948,321
	BUTTE			
20	FOOD AND KINDRED PRODUCTS	631	375	84,380,718
23	APPAREL + OTHER PRODUCTS ETC.	10		14.191
24	LUMBER + #OOD PRODUCTS EXCEPT FURNITURE	1,363	856	122,627,930
25	FURNITURE + FIXTURES	60		5 + 821
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	178	55	238,148
28	CHEMICAL + ALLIED PRODUCTS	9	7	140,364
32	STONE CLAY + GLASS PRODUCTS	4		159.242
33	PRIMARY METAL INDUSTRIES	4		47,376
34	FABRICATED METAL PRODUCTS. EXCPT. ORDN. ETC	201	176	1,381,020
35	MACHINERY, EXCEPT ELECTRICAL	106	19	657,441
38	SCIENTIFIC INSTRUMENTS ETC.	16		64,622
39	M1SC. MANUFACTURING INDUSTRIES	159	183	45,020,194
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	2,681	1,671	254,737,067

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

Water Use		1,729,440	40,853,841	119,070	41,145,271	155,319	84.002.941		628,002	255,687	1,876,544	185,220	171,641	21.172	3,138,266		11,054	162,455,129	22,517	7.700	1,392,558	315+339	1,169,381,910	
mplayees Reported			376				377			61					61			3+328			2		1,549	
Number of Employees		36	999	6	164	13	1,221		6	36	13	14	3	7	82		9	3,060	4	S	66	155	2,449	
	CALAVERAS	FOOD AND NINDRED PRODUCTS	LUMBER + #OUD PRODUCTS EXCEPT FURNITURE	PRINTING, PUBLISHING + ALLIED INDUSTRIES	STONE CLAY + GLASS PRODUCTS	PRIMARY METAL INDUSTRIES	TOTAL ALL MANUFACTURES (TUTAL ACRE FEET)	COLUSA	STONE CLAY + GLASS PRODUCTS	FOOD AND KINDRED PRODUCTS	LUMBER + #000 PRODUCTS EXCEPT FURNITURE	PRIMIING, PUBLISHING + ALLIED INDUSTRIES	CHEMICAL + ALLIED PRODUCTS	MACHINERY, EXCEPT ELECTRICAL	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	CONTRA COSTA	ORDNANCE AND ACCESSORIES	FOOD AND KINDRED PRODUCTS	TEXTILE MILL PRODUCTS	APPAREL + OTHER PRUDUCTS ETC.	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	FURNITURE + FIXTURES	PAPER + ALLIED PRODUCTS	
S.I.C. Code		20	24	27	32	33			32	20	54	27	28	35			19	20	22	23	24	25	56	

200 2,409,842,089 1,354,968,164 1,521,298 12,780,542 1,299,190 1,868,559 4,446,556 5,228,861,802 511,812 12,485 71,446 11,708,215 1,672,831 17,804,327 88,343,407 11,025,572 65,528 21,172 258,511 470.101 Water Use 829 140 620 626 0 37 781 9 2,523 7,002 567 656 545 18,903 1+032 Reported Number of Employees 246 587 722 7,722 944 576 112 86 30 20 1,341 3,838 27,500 2,263 2,350 3,867 1,981 Total County and Standard Industrial Classification Major Industry Group PRINTING, PUBLISHING + ALLIED INDUSTRIES PRINTING, PUBLISHING + ALLIED INDUSTRIES FABRICATED METAL PRODUCTS. EXCPT. ORDN. ETC LUMBER + WOOD PRODUCTS EXCEPT FURNITURE PETROLEUM REFINING + RELATED INDUSTRIES ELECTRICAL MACHNAY, EUPMNT + SUPPLIES RUBBER + MISC. PLASTICS PRODUCTS MISC. MANUFACTURING INDUSTRIES MISC. MANUFACTURING INDUSTRIES CONTRA COSTA (CONTINUED) STONE CLAY + GLASS PRODUCTS SCIENTIFIC INSTRUMENTS ETC. STONE CLAY + GLASS PRODUCTS MACHINFRY . EXCEPT ELECTRICAL MACHINFRY, EXCEPT ELECTRICAL CHEMICAL + ALLIED PRODUCTS FOOD AND KINDRED PRODUCTS PRIMARY METAL INDUSTRIES TRANSPORTATION EQUIPMENT TRANSPORTATION EQUIPMENT TOTAL ALL MANUFACTURES (TOTAL ACRE FEET) TOTAL ALL MANUFACTURES (TOTAL ACRE FEFT) DEL NORTE 5.6 S.I.C. Code 33 39 20 54 32 34 35 35 37 27 28 3.0 33 27 39 32 36 7 6

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959

(CUBIC FEET)

TABLE 6

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP
1957 - 1959
(CUBIC FEET)

ESTIMATED ANNUAL TOTAL FRESH WATER USE 8Y COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

County and Standard Industrial Classification	Number of Employees	mployees	Water Use
Major Industry Group	Tatal	Reported	
(CONTINUED)			
MACHNRY, EGPMNT + SUPPLIES	17		101.189
ION ECUIPMENT	680	337	25,451,934
INSTRUMENTS ETC.	41		118,680
ACTURING INDUSTRIES	5.0	13	299+871
TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	13,370	7,378	994,123,173
INDREU PRODUCTS	349	345	113.340.421
+ WOOD PRODUCTS EXCEPT FURNITURE	153		48.708.670
FIXTURLS	2		3,881
PUBLISHING + ALLIED INDUSTRIES	27	20	57,942
GLASS PRODUCTS	1	60	30.684
MACHINFRY. EXCEPT FLECTRICAL	13		37.045
TOTAL ALL MANUFACTURES (TOTAL ACRE FLET)	545	360	162,178,643
INDRFD PRODUCTS	844	777	42,683,038
PRODUCTS	4		49.217
DOD PRODUCTS EXCEPT FURNITURE	11,644	3,237	661,877,399
FIXTURLS	10		28.042
PAPER + ALLIED PRODUCTS	67		13,609,481
PUBLISHING + ALLIED INDUSTRIES	206	6	2,293,963
ALLIED PRODUCTS	22	9	86,330
REFINING + RELATED INDUSTRIES	6	15	17,645
15C. PLASTICS PRODUCTS	10		84.366

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CHRIC FEET)

HUMBOLD 1 COMITY and Stondard Industry Grown of Stondard Industry Industr
CCUBIC FEET
County and Stondard Industrial Class-fication  HUMBOLDT (CONTINUED)  STONE CLAY + GLASS PRODUCTS FABRICATED METAL PRODUCTS, EXCPT.ORDN.ETC  MACHINERY - EXCEPT ELECTRICAL TRANSPORTATION EULIPMENT  MISC. MANUFACTURES TOTAL ALL MANUFACTURES TOTAL ACRE FEET) TWERIAL  OAD AND KINDRED PRODUCTS FURNITURE + FIXTURES PAPER + ALLIED PRODUCTS FURNITURG. PUBLISHING + ALLIED INDUSTRIES CHEMICAL + ALLIED PRODUCTS STONE CLAY + GLASS PRODUCTS FABRICATED METAL PRODUCTS, EXCPT.ORDN.ETC WACHINERY - EXCEPT ELECTRICAL TRANSPORTATION EULIPMENT MISC. MANUFACTURES TOTAL ALL MANUFACTURES TOTAL ALL MANUFACTURES TOTAL ALL MANUFACTURES TOTAL ACRE FEET) INVO ORUNANCE AND ACCESSORIES FOOD AND KINDRED PRODUCTS FOOD AND KINDRED PRODUCTS
County and Stondord Industrial Classification Major Industry Group SIONE CLAY + GLASS PRODUCTS FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC MACHINERY.EXCEPT ELECTRICAL TRANSPORTATION EULIPMENT MISC. MANUFACTURING INDUSTRIES TOTAL ACRE FEET) IMPERIAL ORDNANCE AND ACCESSORIES FOOD AND NINDRED PRODUCTS EVENITURE + FIXTURES PAPER + ALLIED PRODUCTS CHEMICAL + ALLIED PRODUCTS CHEMICAL + ALLIED PRODUCTS FABRICATED METAL PRODUCTS FABRICATED METAL PRODUCTS TRANSPORTATION EULIPMENT MISC. MANUFACTURES TOTAL ACRE FEET) INYO ORDNANCE AND ACCESSORIES FOOD AND KINDRED PRODUCTS
28. 27. C.

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

S.I.C.	County and Standord Industrial Classification	Number of Employees	mployees	Water Use
Code	Majar Industry Group	Total	Reported	
	INYO (CONTINUED)			
54	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	126		45.534.686
2.7	PRINTING, PUDLISHING + ALLIED INDUSTRIES	19		251+370
28	CHEMICAL + ALLIED PRODUCTS	81	2	11,856,797
32	STONE CLAY + GLASS PRODUCTS	15		529,186
35	MACHINERY, EXCEPT ELECTRICAL	m	\$	4.010
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	254	192	59,390,164
	KERN			
19	ORDNANCE AND ACCESSORIES	946		1.058.148
20	FOOD AND KINDRED PRODUCTS	1,427	273	110.227.457
23	APPAREL + OTHER PRODUCTS EIC.	104		91,553
54	LUMBER + MOOD PRODUCTS EXCEPT FURNITURE	117		6,630,123
25	FURNITURE + FIXTURES	62	11	141,678
92	PAPER + ALLIED PRODUCTS	8		74.435
27	PRINTING. PUBLISHING + ALLIED INDUSTRIES	387	602	87,688,385
28	CHEMICAL + ALLIED PRODUCTS	176	134	9.371.997
53	PETROLEUM REFINING + RELATED INDUSTRIES	1,006	426	239,119,305
30	RUBBER + MISC. PLASTICS PRODUCTS	œ		64,854
31	LEATHER + LEATHER PRODUCTS	m		6.919
32	STONE CLAY + GLASS PRODUCTS	1,092	633	91,668,659
33	PRIMARY METAL INDUSTRIES	228		3,109,282
34	FABRICATED METAL PRODUCTS, LXCPI. ORDN. ETC	161	12	1.204.766
35	MACHINERY. EXCEPT ELECTRICAL	777	212	1.729.167
36	ELECTRICAL MACHNRY, EUPMNT + SUPPLIES	237	559	533.222
37	TRANSPORTATION EQUIPMENT	1,447	11	4.735.011

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

TABLE 6 (CLINTINUEU)

S.I.C.	County ond Standard Industrial Classification	Number of Employees	mployees	Water Use
ode	Major Industry Group	Total	Reported	
	LAKE (CONTINUED)			
32	STONE CLAY + GLASS PRODUCTS	7		279.112
35	MACHINERY. EXCEPT ELECTRICAL	m		9.0074
	TOTAL ALL MANUFACTURES (TOTAL ACKE FEET)	153	279	23,700,810
	LASSEN			
20	FOOD AND AINDRED PRODUCTS	55	96	2.244.758
24	LUMBER + WOUD PRODUCTS EXCEPT FURNITURE	717	350	281.733.032
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	10		99.238
32	STONE CLAY + 6LASS PRODUCTS	-	-	8,020
	TOTAL ALL MANUFACTURES (TOTAL ACKE FLET)	783	385	284,085,048
	MADERA			
20	FOUN AND KINDRED PRODUCTS	797	301	101,253,193
22	TEXTILE MILL PRUDUCTS	13		180.037
54	LUMBER + *OOD PRUDUCTS EXCEPT FURNITURE	280	136	13,879,825
25	FURNITURE + FIXTURES	9		11.642
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	8 7		549,323
32	STONE CLAY + GLASS PRODUCTS	65	39	815.113
34	FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC	17		137,773
35	MACHINERY, EXCEPT ELECTRICAL	53	13	111.201
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	946	687	116,818,107
	MARIN			
20	FOOD AND KINDRED PRODUCTS	379	156	21.978.898
23	APPAREL + OTHER PRUDUCTS ETC.	8	3	8.979
			9	

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

24 LU 25 FU 26 PA	don't recommend the		Dogge	
		Total	Reported	
	MARIN (CONTINUED)			
	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	171	17	2.950.573
	FURNITURE + FIXTURES	87		89,360
	PAPER + ALLIED PRODUCTS	20		223,304
27 PR	PRINTING, PUBLISHING + ALLIED INDUSTRIES	230	134	431.679
28 CH	CHEMICAL + ALLIED PRODUCTS	6		362,113
30 RU	RUBBER + MISC. PLASTICS PRODUCTS	58	25	412.646
31 LE	LEATHER + LEATHER PRODUCTS	232	175	1.021,424
32   ST	STONE CLAY + GLASS PRODUCTS	169	98	3,472,840
33 P.	PAIMARY METAL INDUSTRIES	89		797 • 074
34 FA	FABRICATED METAL PRODUCTS. EXCPT. ORDN. ETC	169	182	2.078.657
35 MA	MACHINERY. EXCEPT ELECTRICAL	19	09	217,483
36 EL	ELECTRICAL MACHNRY, EQPMNI + SUPPLIES	15	4	25.006
TR TR	TRANSPORTATION EQUIPMENT	235		820,126
38 86	SCIENTIFIC INSTRUMENTS ETC.	57		331,683
39 4[	MISC. MANUFACTURING INDUSTRIES	46	19	277.199
10	TOTAL ALL MANUFACTURES (TOTAL ACRE FEFT)	1,963	861	35,499,044
	MARIPOSA			
24   LU	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	63		17,124,366
27 PR	PRINTING, PUBLISHING + ALLIED INDUSTRIES	7		47.641
35 MA	MACHINERY * EXCEPT ELECTRICAL	1		3.025
7.	TOTAL ALL MANUFACTURES (TOTAL ACKE FEET)	1.1		17.175.052

TABLE 6 (CONTINUED)
ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP
1957 - 1959
(CUBIC FEET)

	(CUBIC FEET)			
S.I.C.	County and S	Number of Employees	mployees	Water Use
Code	Major Industry Group	Tatał	Reported	
	MENDOCINO			
20	FOOD AND KINDRED PRODUCTS	126	53	7.030.327
54	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	4,726	1,381	324,529,066
57	FURNITURE + FIXTURES	2		3,881
56	PAPER + ALLIED PRODUCTS	265	074	200,896,718
2.7	PRINTING, PUBLISHING + ALLIED INDUSTRIES	69	2	840,690
3.1	LEATHER + LEATHER PRODUCTS	1		505
32	STONE CLAY + GLASS PRODUCTS	7		279.112
34	FAURICATEU METAL PRUDUCTS.EXCPT.ORDN.ETC	m		18,002
35	MACHINERY. EXCEPT ELECTRICAL	19		202,695
38	SCIENTIFIC INSTRUMENTS ETC.	2		11.638
39	MISC. MANUFACTURING INDUSTRIES	7		12.098
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	5,553	1,852	533,824,729
	MERCED			
20	FOOD AND KINDRED PRODUCTS	1,056	305	301,247,421
24	LUMBER + MOOD PRODUCTS EXCEPT FURNITURE	75		7.226.924
25	FURNITURE + FIXTURES	2		3+881
26	PAPER + ALLIED PROUUCTS	51		3.098.709
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	137	76	605.688
28	CHEMICAL + AELIED PRODUCTS	80	2	54.540
32	STONE CLAY + GLASS PRODUCTS	52	2.5	4.838.576
34	FAURICATEU METAL PRODUCTS. EXCPT. ORDN. ETC	75	0 7	420+331
35	MACHINERY. EXCEPT ELECTRICAL	91	20	200.029
37	THANSPORTATION EUGIPMENT	20		14.705
39	MISC. MANUFACTURING INDUSTRIES	v	6	61,660
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	1.563	493	317,772,470

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

_		CAB	LE 6																					 	 
	Water Use			8,910	105,440,637	7.762	79.380	767,558	106,704,247		30,496	30,496		343,209,744	64,021	371,696	7,963,816	95,864	3.962.094	3,396,735	1,445,538	356,329	602,764		
	nployees	Reported			17	•	•		7.1					1,506	68	275			150	10	188		15		
	Number of Employees	Total		2	427	4	9	11	450		9	9		2 , 038	69	349	219	45	313	310	190	2	27		
(CUBIC FEET)	County and S	Mojor Industry Group	Modoc	FOOD AND KINDRED PRODUCTS	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	FURNITURE + FIXTURES	PRINTING, PUBLISHING + ALLIED INDUSTRIES	STONE CLAY + GLASS PRODUCTS	TOTAL ALL MANUFACTURES	MONO	MACHINERY, EXCEPT ELECTRICAL	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	MONTEREY	FOOD AND KINDRED PRODUCTS	TEXTILE MILL PRODUCTS	APPAREL + OTHER PRODUCTS ETC.	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	FURNITURE + FIXTURES	PAPER + ALLIED PRODUCTS	PRINTING, PUBLISHING + ALLIED INDUSTRIES	CHEMICAL + ALLIED PRODUCTS	PETROLEUM REFINING + RELATED INDUSTRIES	RUBBER + MISC. PLASTICS PRODUCTS		
	S.I.C.	Code		20	24	25	27	32			35			20	22	23	24	25	26	27	28	29	30		

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

ABLE OTCONTINUEN

S.I.C.	County and Standard Industrial Classification	Number of Employees	nployees	Woter Use
Code		Total	Reported	
	MONTEREY (CONTINUED)			
32	STONE CLAY + GLASS PRUDUCTS	452	370	55.638.211
34	FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC	82	11	463.696
3.5	MACHINERY. EXCEPT ELECTRICAL	104		316,378
36	ELECTRICAL MACHNRY, EQPMNT + SUPPLIES	06		218,037
37	TRANSPORTATION EQUIPMENT	13		44,288
38	SCIENTIFIC INSTRUMENTS ETC.	11		25,609
39	MISC. MANUFACTURING INDUSTRIES	16	2	515.827
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	4,327	2,595	418,690,651
	NADA			
20	FOOD AND KINDRED PRODUCTS	470	198	176.11.646
23	APPAREL + OTHER PRODUCTS ETC.	488		438.087
24	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	19		2,604,545
25	FURNITURE + FIXTURES	38		64,750
26	PAPER + ALLIED PRODUCTS	28	32	10.511
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	113		1,201,199
31	LEATHER + LEATHER PRODUCTS	162	74	7,643,770
32	STONE CLAY + GLASS PRODUCTS	462	4	32,116,200
33	PRIMARY METAL INDUSTRIES	780	834	5,146,937
34	FABRICATED METAL PRODUCTS. EXCPT. ORDN. ETC	28		283,257
35	MACHINERY, EXCEPT ELECTRICAL	25	2	169,345
36	ELECTRICAL MACHNRY, EUPMNT + SUPPLIES	20	15	11,548
37	TRANSPORTATION EQUIPMENT	W		17.862
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEFT)	2,638	1,159	59,685,958

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

TABLE 6

1,459,613 557,869 41,035 38,982 89,660 60,888 2,236 51,332,255 1,178 1,407,422 1,398,533 9,321,108 49,904,023 14,752,060 113,843,043 48,167,505 139,556 208,102,214 1,147,764 2,251,717 11,523 74,911 1,305,587 86,025,141 Water Use 1,687 260 180 73 25 33 69 66 8 1 437 132 1,093 869 Reported Number of Employees 1,720 3,918 916 1,075 16 1,073 238 497 85 673 546 631 814 651 1,874 Tatal County and Stondord Industrial Classification PRINTING, PUBLISHING + ALLIED INDUSTRIES FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC PRINTING, PUBLISHING + ALLIED INDUSTRIES LUMBER + WOOD PRODUCTS EXCEPT FURNITURE LUMBER + WOOD PRODUCTS EXCEPT FURNITURE PETROLEUM REFINING + RELATED INDUSTRIES ELECTRICAL MACHNRY, EDPMNT + SUPPLIES Major Industry Group RUBBER + MISC. PLASTICS PRODUCTS MISC. MANUFACTURING INDUSTRIES APPAREL + OTHER PRODUCTS ETC. STONE CLAY + GEASS PRODUCTS MACHINERY . EXCEPT ELECTRICAL CHEMICAL + ALLIED PRODUCTS LEATHER + LEATHER PRODUCTS FOOD AND KINDRED PRODUCTS FOOD AND KINDRED PRODUCTS ORDNANCE AND ACCESSORIES PRIMARY METAL INDUSTRIES TRANSPORTATION EQUIPMENT PAPER + ALLIED PRODUCTS TOTAL ALL MANUFACTURES TEXTILE MILL PRODUCTS FURNITURE + FIXTURES DRANGE NEVADA S.I.C. Code 20 24 27 33 35 36 37 39 19 20 23 74 26 27 28 30 31 32 34 22 25

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

IMBLE GILLONTHIULES

S.I.C.	County and S	Number of Employees	nployees	Water Use
Code	Major Industry Group	Total	Reported	
	ORANGE (CONTINUED)			
32	STONE CLAY + GLASS PRODUCTS	1,036	614	5,446,253
33	PRIMARY METAL INDUSTRIES	766	819	20,599,609
34	FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC	3,213	1,320	34,232,146
35	MACHINFRY, EXCEPT ELECTRICAL	2,246	773	119,743,389
36	ELECTRICAL MACHNRY, EOPMNT + SUPPLIES	7,383	6,589	46,329,551
37	TRANSPORTATION EQUIPMENT	2,415	1,218	40,615,431
38	SCIENTIFIC INSTRUMENTS ETC.	2,417	1,892	5,908,285
39	MISC. MANUFACTURING INDUSTRIES	883	388	3,476,775
	TOTAL ALL MANUFACTURES  (TOTAL ACKE FLET)	34,750	17,957	775.821.574
	PLACER			
20	FOOD AND KINDRFD PRODUCTS	65	12	3,251,352
24	LUMBER + WOOD PRUDUCTS EXCEPT FURNITURE	715	675	14,368,167
25	FURNITURE + FIXTURES	2		3,881
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	74		760,238
59	PETROLEUM REFINING + RELATED INDUSTRIES	9		1.043,400
31	LEATHER + LEATHER PRODUCTS	ı		766
32	STONE CLAY + GLASS PRODUCTS	412	334	6.832.663
33	PRIMARY METAL INDUSTRIES	7		47.238
34	FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC	14		71.959
35	MACHINERY, EXCEPT ELECTRICAL	1	1	802
37	TRANSPORTATION EQUIPMENT	1		3,572
39	MISC. MANUFACTURING INDUSTRIES	13		39,319
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	1,302	896	26,423,357

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

TABLE 6

24 LU 27 PR 35 MAA 35 TE 10 (1	LLY ACRY. MI	10,154 11 14	Reported 804	Woter Use
	MAS  WOOD PRODUCTS EXCEPT  PUBLISHING + ALLIED  AY + GLASS PRODUCTS  Y. EXCEPT ELECTRICAL  MANUFACTURES  CRE FEET)  ERSIDE  KINDRED PRODUCTS  MILL PRODUCTS	1,15	000	
	WOOD PRODUCTS EXCEPT  PUBLISHING + ALLIED  AY + GLASS PRODUCTS  Y. EXCEPT ELECTRICAL  L MANUFACTURES  CRE FEET)  ERSIDE  KINDRED PRODUCTS  MILL PRODUCTS	1,154	804	
	AY + GLASS PRODUCTS  Y. EXCEPT ELECTRICAL L MANUFACTURES CRE FEET) ERSIDE KINDRED PRODUCTS MILL PRODUCTS	11	4	5,282,301,173
	M E E CA	7	>	10,537
	A K ER			279,112
	OTAL ALL MANUFACTURES TOTAL ACRE FEET) RIVERSIDE OOD AND KINDRED PRODUCTS EXTILE MILL PRODUCTS	2		6,000
	표 조 .	1,171	810	5,282,596,871
	¥ 1 .			
	Σ .	1,448	316	52,117,865
		1		21,438
23 AP	APPAREL + UTHER PRODUCTS ETC.	256	7	247.426
24 LU	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	218	192	218,991
25 FU	FURNITURE + FIXTURES	224	146	290+720
26 PA	PAPER + ALLIED PRODUCTS	248	256	3,073,183
27 PR	PRINTING, PUBLISHING + ALLIED INDUSTRIES	069	375	1,615,133
28 CH	CHEMICAL + ALLIED PRODUCTS	11	1	396,766
29 PE	PETROLEUM REFINING + RELATED INDUSTRIES	15	142	77,195,993
3n RU	RUBBER + MISC. PLASTICS PRODUCTS	17		127,591
31 LE	LEATHER + LEATHER PRODUCTS	2		4,613
32 ST	STONE CLAY + GLASS PRUDUCTS	1,465	1+202	125,580,539
33 PR	PRIMARY METAL INDUSTRIES	1,444	2,100	16,448,553
34 FA	FAGRICATED METAL PRODUCTS, EXCPT. ORDN. ETC	257	63	2.801.672
35 MA	MACHINERY, EXCEPT ELECTRICAL	736	822	4,520,519
36 EL	ELECTRICAL MACHNRY, ELPMNI + SUPPLIES	853		2,111,468
37 TR	TRANSPORTATION EQUIPMENT	4,808	5 • 0 4 1	22.668.637
3.8 SC	SCIENTIFIC INSTRUMENTS ETC.	151	12	474,588

TABLE 6

7,150 48.680 22,270 1,539,238 532,969,208 129,352 27,737,033 1,636,974 46.865 311,454,933 2,536,207 344,320 31,039,998 388,084 83,951,392 2,706,618 42.734.670 1,609,863 747,755,075 17,166 4,799,961 8,215,861 6,779,224 58,495 Water Use 1,015 179 156 10,672 4,864 94 201 94 9 177 6.700 Reported Number of Employees 167 177 323 128 55 27 390 12,899 6,782 84 606 79 1,410 94 699 393 35 93 24,191 12,454 Total (CUBIC FEET) County and Standard Industrial Classification Major Industry Group PRINTING, PUBLISHING + ALLIED INDUSTRIES FABRICATED METAL PRODUCTS, EXCPT.ORDN. ETC LUMBER + WOOD PRODUCTS EXCEPT FURNITURE PETROLEUM REFINING + RELATED INDUSTRIES ELECTRICAL MACHNRY, EOPMNT + SUPPLIES RUBBER + MISC. PLASTICS PRODUCTS MISC. MANUFACTURING INDUSTRIES MISC. MANUFACTURING INDUSTRIES APPAREL + OTHER PRODUCTS ETC. STONE CLAY + GLASS PRODUCTS MACHINERY, EXCEPT ELECTRICAL SCIENTIFIC INSTRUMENTS ETC. CHEMICAL + ALLIED PRODUCTS LEATHER + LEATHER PRODUCTS RIVERSIDE (CONTINUED) FOOD AND KINDRED PRODUCTS PRIMARY METAL INDUSTRIES ORDNANCE AND ACCESSORIES TRANSPORTATION EQUIPMENT PAPER + ALLIED PRODUCTS TOTAL ALL MANUFACTURES TOTAL ALL MANUFACTURES FURNITURE + FIXTURES (TOTAL ACRE FEFT) (TOTAL ACRE FEFT) SACRAMENTO 20 34 38 35 S.I.C. Code 39 19 30 39 92 33 23 54 25 27 59 31 37

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959

TABLE 6

7,303,800 87,988 206,432 29,586,779 3,610,679 357,210 17,332,468 50,838 62,618 51,830,405 78,947,367 502,472 393,665 59,967,875 599,443 818,484 1,521,388 12,242,672 23,585 244,185,603 282,132,492 4,111,852 623,381 Water Use 238 145 383 œ 1,695 11 123 1,116 200 199 1,628 8,084 104 Reported Number of Employees 109 468 13 169 859 1,908 102 525 265 336 479 307 974 1,518 47 2,591 7,550 Total (CUBIC FEET) PRINTING, PUBLISHING + ALLIED INDUSTRIES County and Standard Industrial Classification FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC PRINTING, PUBLISHING + ALLIED INDUSTRIES FABRICATED METAL PRODUCTS, EXCPT, ORDN, ETC PETROLEUM REFINING + RELATED INDUSTRIES LUMBER + WOOD PRODUCTS EXCEPT FURNITURE Mojor Industry Group RUBBER + MISC. PLASTICS PRODUCTS APPAREL + OTHER PRODUCTS ETC. STONE CLAY + GLASS PRODUCTS STONE CLAY + GLASS PRODUCTS MACHINERY, EXCEPT ELECTRICAL CHEMICAL + ALLIED PRODUCTS LEATHER + LEATHER PRODUCTS FOOD AND KINDRED PRODUCTS FOOD AND KINDRED PRODUCTS PRIMARY METAL INDUSTRIES PRIMARY METAL INDUSTRIES ORDNANCE AND ACCESSORIES PAPER + ALLIED PRODUCTS PAPER + ALLIED PRODUCTS TOTAL ALL MANUFACTURES (TOTAL ACRE FEET) TEXTILE MILL PRODUCTS FURNITURE + FIXTURES SAN BERNARDINO SAN BENITO S.I.C. Code 26 33 23 54 25 27 31 19 34 20 26 28 59 32 33 34 27 35

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

I ADLE O ILUINTINOLUI

SALE						
SAN UERNARDINO (CONTINUED)  MACHINERY EXCEPT ELECTRICAL  LECTRICAL MACHINY ELECTRICAL  MISC, MANUFACTURINO EOUTHMIT SUPPLIES  MISC, MANUFACTURINO EOUTHMIT STO.  MISC, MANUFACTURINO EOUTHMIT STO.  MISC, MANUFACTURINO EDUCINES  TOTAL ACLE MANUFACTURES  TEXTILE MILL PRODUCTS  APPAREL + OTHER PRODUCTS  PRINTING, PUBLISHING + ALLIED INDUSTRIES  PREMEMER + MISC, PLAST FORDUCTS  PERFORMER + MISC, PLAST FORDUCTS  MUSCHER + LEATER PRODUCTS  TOTAL  TARBITIONE CLAY + GLASS PRODUCTS  FABRICATE MACHINEY ELECTRICAL  MACHINERY ECEPT ELECTRICAL  MACHINERY ELECTRICAL  TRANSPORTATION EQUIPMENT + SUPPLIES  TRANSPORTATION EQUIPMENT    467  14.7  22  24  26  27  26  27  27  26  27  27  26  27  27	<u>ن</u>	County and Standard Industrial Classification	Number of E	mployees	Water Use	
SAN WERNARDINO (CONTINUED)  MACHINERY-EXCEPT ELECTRICAL  LLECTRICAL MACHNRY-ECOPMIT + SUPPLIES  1.768  SCIENTIFIC INSTRUMENTS ETC.  MISC. MANUFACTURING INDUSTRIES  TOTAL ACRE FEET)  SAN JOAGUIN  FOOD AND KINDRED PRODUCTS  TEXTILE MILL PRODUCTS EXCEPT FURNITURE  COOD AND KINDRED PRODUCTS  TEXTILE MILL PRODUCTS  APPAREL + OTHER PRODUCTS  APPAREL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  PETROLEUM REFINING + ALLIED INDUSTRIES  PRINTING, PUBLISHING + ALLIED PRODUCTS  TRUGGER + MISC. PLASTICS PRODUCTS  RUGGER + MISC. PLASTICS PRODUCTS  SIONE CLAY + GLASS PRODUCTS  SIONE CLAY + GLASS PRODUCTS  FABRICATED METAL PRODUCTS.  SIONE CLAY + GLASS PRODUCTS  MACHINERY-EXCEPT ELECTRICAL  TRANSPORTATION EUUTPWENT  TRANSPORTATION EUUTPWENT  TRANSPORTATION EUUTPWENT  453	ode	Major Industry Group	Total	Reported		_
MACHINERY, EXCEPT ELECTRICAL LECTRICAL MACHNRY, ECOPHUT + SUPPLIES  LECTRICAL MACHNRY, ECOPHUT + SUPPLIES  TRANSPORTATION EQUIPMENT  SCIENTIFIC INSTRUMENTS ETC.  MISC, MANUFACTURING INDUSTRIES  TOTAL ACRE FEET)  SAN JOAQUIN  FOOD AND KINDRED PRODUCTS  TEXTILE MILL PRODUCTS  TEXTILE MILL PRODUCTS  APPAREL + OTHER PRODUCTS  LUMBER + MOOD PRODUCTS  EXAMELA + ALLIED PRODUCTS  PRINTING, PUBLISHING + ALLIED INDUSTRIES  PRINTING, PUBLISHING + RELATED INDUSTRIES  PRINTING, PUBLISHING + RELATED INDUSTRIES  FRUNCEL + LEATHER PRODUCTS  RUNGER + MISC, PLASTICS PRODUCTS  SIONE CLAY + GLASS PRODUCTS  SIONE CLAY + GLASS PRODUCTS  MACHINERY, EXCEPT LECTRICAL  TRANSPORTATION EUUTPWENT  TRANSPORTATION EUUTPWENT  1,349  ELECTRICAL MACHNRY, EUPPMIT  1,349  ELECTRICAL MACHNRY, EUPPMIT  1,460  1,470  1,4		SAN BERNARDING (CONTINUED)				
LECTRICAL MACHNAY - EOPMNT + SUPPLIES  TRANSPORTATION EOUIPMENT SCIENTIFIC INSTRUMENTS ETC.  MISC. MANUFACTURES  STORY ALL MANUFACTURES (TOTAL ACRE FEET) SAN JOAGOUIN FOOD AND KINDRED PRODUCTS SAN JOAGOUIN FATTLE MILL PRODUCTS CHEMICAL + ALLIED PRODUCTS STONE CLAY + GLASS PRODUCTS STONE CLAY +	35	MACHINERY. EXCEPT ELECTRICAL	467	98	15,680,672	
SCIENTIFIC INSTRUMENTS ETC.  MISC, WANUFACTURING INDUSTRIES  TOTAL ACRE FEET)  SAN JOAGUIN FOOD AND KINDRED PRODUCTS  TEXTILE MILL PRODUCTS  TEXTILE MILL PRODUCTS EXCEPT FURNITURE  FUNNITURE + TIXTURES  PAPER + ALLIED PRODUCTS  CHEMICAL HOLDSTRIES  STONE CLAY + GLASS PRODUCTS  CHEMICAL PRODUCTS-EXCPT.ORDN.ETC  AMACHINENY-EXCEPT ELECTRICAL  TRANSPORTATION EUUIPMENT  TRANSPORTATION EUUIPMENT  453	36	ELECTRICAL MACHNRY, EGPMNT + SUPPLIES	837	801	29,366,209	
SCIENTIFIC INSTRUMENTS ETC.  MISC. MANUFACTURING INDUSTRIES  TOTAL ACRE FEET  SAN JOAGUIN FOOD AND KINDRED PRODUCTS  TEXTILE MILL PRODUCTS  APPAREL + OTHER PRODUCTS  LUMBER + WOOD PRODUCTS EXCEPT FURNITURE  FURNITURE + FIXTURES  PAPER + ALLIED PRODUCTS  FURNITURG, PUBLISHING + ALLIED INDUSTRIES  FURNITURG, PUBLISHING + RELATED INDUSTRIES  PETROLEUM REFINING + RELATED INDUSTRIES  PETROLEUM REFINING + RELATED INDUSTRIES  RUGGER + MISC. PLASTICS PRODUCTS  SIONE CLAY + GLASS PRODUCTS  FABRICATED METAL INDUSTRIES  FABRICATED METAL PRODUCTS  FABRICATED METAL PR	37	TRANSPORTATION EQUIPMENT	1,768	134	5,783,724	
MISC. MANUFACTURING INDUSTRIES  TOTAL ACRE FEET)  SAN JOAQUIN  FOOD AND KINDRED PRODUCTS  TEXTILE MILL PRODUCTS  TEXTILE MILL PRODUCTS  TEXTILE MILL PRODUCTS  TEXTILE MILL PRODUCTS  APPAREL + OTHER PROUCTS EXCEPT FURNITURE  FURNITURE + FIXTURES  PRINTING PUBLISHING + ALLIED INDUSTRIES  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  TOTAL  RUBGER + MISC. PLASTICS PRODUCTS  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  TOTAL  RUBGER + MISC. PLASTICS PRODUCTS  TOTAL  RUBGER + MISC. PLASTICS PRODUCTS  TOTAL  TOTAL	38	SCIENTIFIC INSTRUMENTS ETC.	61	85	104.506	
TOTAL ACRE FEET) SAN JOADUIN FOOD AND KINDRED PRODUCTS  TEXTILE MILL PRODUCTS  TOTAL ACHIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  CHEMICAL HATHER PRODUCTS  STONE CLAY + GLASS PRODUCTS  FABRICATED METAL INDUSTRIES  FABRICATED METAL INDUSTRIES  TOTAL  TRANSPORTATION EQUIPMENT  TRANSPORTATION EQUIPMENT  453	39	MISC. MANUFACTURING INDUSTRIES	232	10	2,728,841	
FOOD AND KINDRED PRODUCTS  TEXTILE MILL PRODUCTS  TEXTILE MILL PRODUCTS ETC.  LUMBER + WOOD PRODUCTS ETC.  LUMBER + WOOD PRODUCTS EXCEPT FURNITURE  FURNITURE + FIXTURES  PAPER + ALLIED PRODUCTS  PAPER + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  PETROLEUM REFINING + RELATED INDUSTRIES  TOWNING, PUBLISHING + RELATED INDUSTRIES  TOWNING, PUBLISHING + RELATED INDUSTRIES  FAULTED PRODUCTS  LEATHER + LEATHER PRODUCTS  SIONE CLAY + GLASS PRODUCTS  FAURICATED METAL PRODUCTS  FAURICATED METAL PRODUCTS  FAURICATED METAL PRODUCTS.  FAURICATED METAL PRODUCTS.  FAURICATED METAL PRODUCTS.  FAURICATED METAL PRODUCTS.  TRANSPORTATION EQUIPMENT + SUPPLIES  TRANSPORTATION EQUIPMENT  1.349		TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	20,034	14,284	746,502,638	
FOOD AND KINDRED PRODUCTS  TEXTILE MILL PRODUCTS  TEXTILE MILL PRODUCTS  TEXTILE MILL PRODUCTS  APPAREL + OTHER PRODUCTS ETC.  LUMBER + WOOD PRODUCTS EXCEPT FURNITURE  FURNITURE + FIXTURES  PAPER + ALLIED PRODUCTS  PRINTING, PUBLISHING + ALLIED INDUSTRIES  CHEMICAL + ALLIED PRODUCTS  PRINTING, PUBLISHING + RELATED INDUSTRIES  CHEMICAL + ALLIED PRODUCTS  PRINTING, PUBLISHING + RELATED INDUSTRIES  CHEMICAL + ALLIED PRODUCTS  PRINTING, PUBLISHING + RELATED INDUSTRIES  TOWE CLAY + GLASS PRODUCTS  SIONE CLAY + GLASS PRODUCTS  PRIMARY METAL INDUSTRIES  SIONE CLAY + GLASS PRODUCTS  PRIMARY WETAL INDUSTRIES  SIONE CLAY + GLASS PRODUCTS  PRIMARY METAL INDUSTRIES  SIONE CLAY + GLASS PRODUCTS  SIONE CLAY + GLASS		SAN JOAQUIN				
TEXTILE MILL PRODUCTS  APPAREL + OTHER PRODUCTS EXCEPT FURNITURE  LUMBER + WOOD PRODUCTS EXCEPT FURNITURE  FURNITURE + FIXTURES  FURNITURE + FIXTURES  PAPER + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  RUDGER + MISC. PLASTICS PRODUCTS  LEATHER + LEATHER PRODUCTS  STONE CLAY + GLASS PRODUCTS  FRIMARY METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  MACHINERY.EXCEPT ELECTRICAL  ELECTRICAL MACHNRY.EUGPMINT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	20	FOOD AND KINDRED PRODUCTS	6,023	3,381	813,486,398	
APPAREL + OTHER PRODUCTS ETC.  LUMBER + WOOD PRODUCTS EXCEPT FURNITURE  FURNITURE + FIXTURES  PAPER + ALLIED PRODUCTS  PRINTING, PUBLISHING + ALLIED INDUSTRIES  CHEMICAL + ALLIED PRODUCTS  PRINTING, PUBLISHING + RELATED INDUSTRIES  CHEMICAL + ALLIED PRODUCTS  PETROLEUM REFINING + RELATED INDUSTRIES  RUBGER + MISC. PLASTICS PRODUCTS  ELEATHER + LEATHER PRODUCTS  STONE CLAY + GLASS PRODUCTS  PRIMARY METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  ELECTRICAL MACHNRY.EUPMNT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	22	TEXTILE MILL PRODUCTS	24	21	80,832	
LUMBER + WOOD PRODUCTS EXCEPT FURNITURE  FURNITURE + FIXTURES  PAPER + ALLIED PRODUCTS  PRINTING, PUBLISHING + ALLIED INDUSTRIES  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  RUDDER + MISC. PLASTICS PRODUCTS  LEATHER + LEATHER PRODUCTS  SIONE CLAY + GLASS PRODUCTS  SIONE CLAY + GLASS PRODUCTS  FABRICATED METAL INDUSTRIES  FABRICATED METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  TRANSPORTATION EQUIPMENT  453	23	APPAREL + OTHER PROUUCTS ETC.	21		30.841	
FURNITURE + FIXTURES  PAPER + ALLIED PRODUCTS  PAPER + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  TOUGHER + MISC. PLASTICS PRODUCTS  LEATHER + LEATHER PRODUCTS  STONE CLAY + GLASS PRODUCTS  STONE CLAY + GLASS PRODUCTS  STONE CLAY + GLASS PRODUCTS  FABRICATED METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY, EXCEPT ELECTRICAL  ELECTRICAL MACHNRY, EUPPHLIES  TRANSPORTATION EQUIPMENT  1.34.9  ELECTRICAL MACHNRY, EUPPHLIES  TRANSPORTATION EQUIPMENT  453	24	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	1,226	1,099	11,203,082	
PAPER + ALLIED PRODUCTS  PRINTING, PUBLISHING + ALLIED INDUSTRIES  CHEMICAL + ALLIED PRODUCTS  CHEMICAL + ALLIED PRODUCTS  PETROLEUM REFINING + RELATED INDUSTRIES  RUDDER + MISC, PLASTICS PRODUCTS  LEATHER + LEATHER PRODUCTS  STONE CLAY + GLASS PRODUCTS  STONE CLAY + GLASS PRODUCTS  FABRICATED METAL INDUSTRIES  FABRICATED METAL PRODUCTS, EXCPT, ORDN, ETC  MACHINERY, EXCEPT ELECTRICAL  ELECTRICAL MACHNIKY, EUPPMIT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	25	FURNITURE + FIXTURES	81		144,062	
PRINTING, PUBLISHING + ALLIED INDUSTRIES  CHEMICAL + ALLIED PRODUCTS  PETROLEUM REFINING + RELATED INDUSTRIES  RUDDER + MISC. PLASTICS PRODUCTS  STONE CLAY + GLASS PRODUCTS  STONE CLAY + GLASS PRODUCTS  PRIMARY METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  TRANSPORTATION EQUIPMENT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	56	PAPER + ALLIED PRODUCTS	986	675	270.226.037	
CHEMICAL + ALLIED PRODUCTS  PETROLEUM REFINING + RELATED INDUSTRIES  RUDDER + MISC. PLASTICS PRODUCTS  LEATHER + LEATHER PRODUCTS  STONE CLAY + GLASS PRODUCTS  PRIMARY METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  ELECTRICAL MACHNRY.EUPMNIT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	520	304	1,282,246	
PETROLEUM REFINING + RELATED INDUSTRIES  RUDDER + MISC. PLASTICS PRODUCTS  LEATHER + LEATHER PRODUCTS  STONE CLAY + GLASS PRODUCTS  PRIMARY METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  ELECTRICAL MACHNRY.EUPMNT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	28		149	161	8,424,808	
RUDDER + MISC. PLASTICS PRODUCTS  LEATHER + LEATHER PRODUCTS  SIONE CLAY + GLASS PRODUCTS  PRIMARY METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  ELECTRICAL MACHNKY.EUPMNT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	29	PETROLEUM REFINING + RELATED INDUSTRIES	7		1,230,094	
LEATHER + LEATHER PRODUCTS  STONE CLAY + GLASS PRODUCTS  PRIMARY METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  ELECTRICAL MACHNRY.EUPMNT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	30		09	31	767,463	
PRIMARY METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  ELECTRICAL MACHINY.EUPMIT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	31	LEATHER + LEATHER PRODUCTS	2		1,216	
FABRICATED METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  ELECTRICAL MACHNRY.EUPMNT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	32	STONE CLAY + GLASS PRODUCTS	704	522	91,743,304	
FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCEPT ELECTRICAL  1.349  ELECTRICAL MACHNRY.EUPMNT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	33	PRIMARY METAL INDUSTRIES	101	ω	1,126,674	
MACHINERY, EXCEPT ELECTRICAL  ELECTRICAL MACHNRY, EUPMNT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	34	FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC	620	530	7,405,038	
ELECTRICAL MACHNRY+EUPMNT + SUPPLIES  TRANSPORTATION EQUIPMENT  453	35	MACHINERY EXCEPT ELECTRICAL	1,349	973	3,873,993	
TRANSPORTATION EQUIPMENT	36	ELECTRICAL MACHNRY, EUPMNT + SUPPLIES	58	11	255,589	rabli
	37	TRANSPORTATION EQUIPMENT	453	7	1,482,866	. 0
				Ī		

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP
1957 - 1959
(CUBIC FEET)

County and Standard Industrial Classification	Number of Er	Employees	Water Use
Major Industry Group	Totol	Reported	
SAN JOAGUIN (CONTINUED)			
MISC. MANUFACTURING INDUSTRIES	53		431,753
TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	12,437	7,990	1,213,196,296
SAN LUIS OBISPO			
FOOD AND KINDRED PRODUCTS	239	107	19,873,883
APPAREL + UTHER PRODUCTS ETC.	88		46,365
LUMBER + WOUD PRODUCTS EXCEPT FURNITURE	19		4,824,017
FURNITURE + FIXTURES	102		412,223
PRINTING, PUBLISHING + ALLIED INDUSTRIES	142	α	1,606,652
CHÉMICAL + ALLIED PRODUCTS	15		216,619
PETROLEUM REFINING + RELATED INDUSTRIES	214	107	68,665,678
STONE CLAY + GLASS PRODUCTS	35	58	10,915,945
PRIMARY METAL INDUSTRIES	12	14	766,585
FABRICATLD METAL PRUDUCTS, EXCPT, ORDN, ETC	4		22,636
MACHINERY, EXCEPT ELECTRICAL	15	12	15,307
TRANSPORTATION EQUIPMENT	2		7,145
SCIENTIFIC INSTRUMENTS ETC.	14		15,008
MISC. MANUFACTURING INDUSTRIES	12		764642
TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	913	277	107,637,857
SAN MATEO			
FOOD AND KINDRED PRODUCTS	2,894	1,940	94,156,297
TEXTILE MILL PRODUCTS	77	16	151,846
+ OTHER PRODUCTS ETC.	178	100	137,816
LUMBER + #OOD PRUDUCTS EXCEPT FURNITURE	278	99	1+301+922

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959

TABLE 6 795,053 1,769,592 2 122 150 88,002,525 175,650 2.164.349 3.876,469 5.915.330 20,884,334 28,712,863 3,102,038 24.972,519 2.431.776 281,439,412 323,348 301,401,399 83,415 443,535 1,005,822 21,971 26,133 3,198,454 845.705 6,46] Water Use 226 69 231 393 2,033 250 1,547 993 5,197 254 901 226 19 2 1,331 14,731 Number of Employees 172 154 2,796 1,145 451 573 550 144 519 22 055 1 .609 1,674 2,282 1,798 221 1,177 S 160.6 26,061 53 38 Total (CUBIC FEET) County and Standard Industrial Classification PRINTING. PUBLISHING + ALLIED INDUSTRIES FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC PRINTING, PUBLISHING + ALLIED INDUSTRIES PETROLEUM REFINING + RELATED INDUSTRIES LUMBER + #000 PRODUCTS EXCEPT FURNITURE ELECTRICAL MACHNRY, EUPMNT + SUPPLIES Mojor Industry Group RUBBER + MISC. PLASTICS PRUDUCTS MISC. MANUFACTURING INDUSTRIES APPAREL + OTHER PRODUCTS ETC. STONE CLAY + GLASS PRODUCTS SCIENTIFIC INSTRUMENTS ETC. CHEMICAL + ALLIED PRODUCTS LEATHER + LEATHER PRODUCTS SAN MATED (CONTINUED) MACHINERY. EXCPT ELLCTRICAL FOOD AND KINDRED PRODUCTS PRIMARY METAL INDUSTRIES TRANSPORTATION EQUIPMENT ORDNANCE AND ACCESSORIES PAPER + ALLIED PROVUCTS TOTAL ALL MANUFACTURES TEXTILE MILL PRODUCTS FURNITURE + FIXTURES FURNITURE + FIXTURES SANTA BARBARA (TOTAL ACRE FEET) 19 S.I.C. Code 27 31 33 35 36 39 22 30 37 34 38

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

SANTA BARBARA (CONTINUED)
C Total Number of Employees  Total Reported Reported Reported Reported Reported P
ν v

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

TABLE 6 (CUNTINUEU)

SANTA CTOTAL ACL CTOTAL ACR SANTA SA	SANTA CLARA (CONTINUED)  SIONE CLAY + GLASS PRODUCTS  PRIMARY METAL INDUSTRIES  FABRICATED METAL PRODUCTS.EXCPT.ORDN.ETC  MACHINERY.EXCLPT ELECTRICAL  ELECTRICAL MACHNRY.EUPMNT + SUPPLIES  TRANSPORTATION EQUIPMENT  SCIENTIFIC INSTRUMENTS ETC.  MISC. MANUFACTURES  TOTAL ALL MANUFACTURES  SANTA CRUZ  ORDNANCE AND ACCESSORIES  FOOD AND KINDRED PRODUCTS	Total Rep 773 773 7, 2, 253 7, 146 4, 6, 5, 0	) õ	Woter Use	
	ANTA CLARA (CONTINUED) CLAY + GLASS PRODUCTS  RY METAL INDUSTRIES TATEL METAL PRODUCTS, EXCPT.ORDN.ETC  IERY. LXCEPT ELECTRICAL  RICAL MACHNRY, EUPMNT + SUPPLIES  ORTATION EQUIPMENT  IFIC INSTRUMENTS ETC.  MANUFACTURES  ACRE FEET)  SANTA CRUZ  AND KINDRED PRODUCTS	2 2 4	Reported		· -
	CLAY + GLASS PRODUCTS  CLAY + GLASS PRODUCTS  Y METAL INDUSTRIES  TATEL METAL PRODUCTS.EXCPT.ORDN.ETC  IERY.EXCEPT ELECTRICAL  SICAL MACHINRY.EUPMIT + SUPPLIES  ORTATION EQUIPMENT  IFIC INSTRUMENTS ETC.  MANUFACTURES  ALL MANUFACTURES  ACRE FEET)  AND KINDRED PRODUCTS	773 2,146			
	CLAY + GLASS PRODUCTS  ATEL METAL INDUSTRIES  ATEL METAL PRODUCTS, EXCPT.ORDN.ETC  TERY.EXCLPT ELECTRICAL  SORTATION EQUIPMENT + SUPPLIES  ORTATION EQUIPMENT  TIFIC INSTRUMENTS ETC.  MANUFACTURES  ACRE FEET)  SANTA CRUZ  AND KINDRED PRODUCTS	2.253			
	YY METAL INDUSTRIES  TATEL METAL PRODUCTS, EXCPT.ORDN. ETC  IERY, EXCEPT ELECTRICAL  SICAL MACHNRY, EUPMNT + SUPPLIES  ORTATION EQUIPMENT  IFIC INSTRUMENTS ETC.  MANUFACTURES  ALL MANUFACTURES  ACRE FEET)  ACRE FEET)  AND KINDRED PRODUCTS	2,146	2,115	125,042,261	
	TATEL METAL PRODUCTS, EXCPT.ORDN.ETC  IERY, EXCEPT ELECTRICAL  SICAL MACHNRY, EUPMNT + SUPPLIES  ORTATION EQUIPMENT  TIFIC INSTRUMENTS ETC.  MANUFACTURING INDUSTRIES  ALL MANUFACTURES  ACRE FEET)  SANTA CRUZ  AND KINDRED PRODUCTS	2,146	765	21,047,068	
		4.650	1,565	7,746,981	
			2,577	24,894,020	
	PORTATION EQUIPMENT FIFIC INSTRUMENTS ETC.  MANJFACTURING INDUSTRIES  ALL MANUFACTURES  ACRE FEET)  SANTA CRUZ  NCE AND ACCESSORIES  AND KINDRED PRODUCTS	12,298	076.7	45.724.619	
	MANUFACTURING INDUSTRIES ALL MANUFACTURES - ACRE FEET) SANTA CRUZ NCE AND ACCESSORIES	2,596	1,793	17,166,014	
	MANUFACTURING INDUSTRIES ALL MANUFACTURES - ACRE FEET) SANTA CRUZ NCE AND ACCESSORIES AND KINDRED PRODUCTS	576	320	3,959,098	
	ALL MANUFACTURES  ACRE FEET)  SANTA CRUZ  NCE AND ACCESSORIES  AND KINDRED PRODUCTS	397	166	676,424	
	SANTA CRUZ  VCE AND ACCESSORIES  AND KINDRED PRODUCTS	56,345	26,393	803,911,663	
	NCE AND ACCESSORIES AND KINDRED PRODUCTS				
	AND KINDRED PRODUCTS	285		552+330	
		1,905	7176	66,779,695	
	TEXTILE MILL PRODUCTS	1		36+034	
	APPAREL + OTHER PRODUCTS ETC.	81		77,113	
	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	877	102	850,985	
	FURNITURE + FIXTURES	09		120,126	
	PAPER + ALLIED PRODUCTS	14	12	10,256	
	PRINTING, PUBLISHING + ALLIED INDUSTRIES	174	22	1,851,315	
	CHEMICAL + ALLIED PRODUCTS	14		662,297	
	LEUM REFINING + RELATED INDUSTRIES	7		712,658	
	R + MISC. PLASTICS PRODUCTS	18	12	15,000	
31 LEATHER	LEATHER + LEATHER PRODUCTS	80		2,254,753	1
32 STONE C	STONE CLAY + GLASS PRODUCTS	296	22	22,599,216	ABLE
33 PRIMARY	PRIMARY METAL INDUSTRIES	22		366,834	6

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

TABLE 6

	(Cobic rect)			
S.1.C.	County and Standord Industrial Clossification	Number of Employees	ployees	Water Use
e p	Major Industry Group	Total	Reported	
	SANTA CRUZ (CONTINUED)			
34	FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC	33	56	60,857
35	MACHINERY, EXCEPT ELECTRICAL	45		403.919
36	ELECTRICAL MACHNRY+EQPMNT + SUPPLIES	114		406.296
37	TRANSPORTATION EDUIPMENT	-		7+611
38	SCIENTIFIC INSTRUMENTS ETC.	12	9	30.698
39	MISC. MANUFACTURING INDUSTRIES	55	4	131,884
	TOTAL ALL MANUFACTURES (TOTAL ÄCRE FEET)	3,664	1,183	97,929,877
	SHASTA			
20	FOOD AND KINDRED PRODUCTS	150	21	14,239,955
23	APPAREL + OTHER PRODUCTS ETC.	2		3+080
24	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	3,167	2+303	566,026,463
25	FURNITURE + FIXTURES	2		3,495
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	96	5	1,085,417
28	CHEMICAL + ALLIED PRODUCTS	7		59,970
59	PETROLEUM REFINING + RELATED INDUSTRIES	00		1,425,316
32	STONE CLAY + GLASS PRODUCTS	16	12	96,249
33	PRIMARY METAL INDUSTRIES	07	77	21,600
34	FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC	М		17,078
35	MACHINERY. EXCEPT ELECTRICAL	7		19,068
37	TRANSPORTATION EQUIPMENT	-1		3,572
39	MISC. MANUFACTURING INDUSTRIES	4		12,098
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	3,499	2,385	583,013,361 13,384

TABLE 6

33,193,472 33,478,246 12,550 2,163,118 284,774 3,892,886 246,837 628,438 653,453,167 25.200,598 3,711,662 7,376 890,823 648,438,222 139,556 8,169 95,176 555,128 17,821 891,362 3,881 Water Use 819 318 318 0 163 18 2,160 4 2,191 20 Reported Number of Employees 230 410 95 38 14 S 31 37 3,665 1,230 3,501 Total (CUBIC FEET) County and Standard Industrial Classification Major Industry Group PRINTING, PUBLISHING + ALLIED INDUSTRIES FAGRICATED METAL PRODUCTS. EXCPT. ORDN. ETC FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC PRINTING. PUBLISHING + ALLIED INDUSTRIES PETROLEUM REFINING + RELATED INDUSTRIES LUMBER + WOOD PRODUCTS EXCEPT FURNITURE LUMBER + WOOD PRODUCTS EXCEPT FURNITURE LUMBER + WOOD PRODUCTS EXCEPT FURNITURE APPAREL + OTHER PRODUCTS ETC. STONE CLAY + GLASS PRODUCTS STONE CLAY + GLASS PRODUCTS MACHINERY , EXCEPT ELECTRICAL CHEMICAL + ALLIED PRODUCTS CHEMICAL + ALLIED PRODUCTS 20 | FOOD AND KINDRED PRODUCTS FOOD AND KINDRED PRODUCTS FOOD AND KINDRED PRODUCTS TOTAL ALL MANUFACTURES TOTAL ALL MANUFACTURES (TOTAL ACRE FEFT) FURNITURE + FIXTURES FURNITURE + FIXTURES (TOTAL ACRE FEET) SISKIYOU SOLANO SIERRA 25 23 34 20 20 27 28 35 2.5 32 S.I.C. Code 54 32 28 59 54

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959

TABLE 6 (CONTINUED)

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

TABLE 6

SOLANO (CONT 35 MACHINERY, EXCEPT 36 ELECTRICAL MACHNR 37 TRANSPORTATION EQ 39 MISC. MANUFACTURI TOTAL ALL MANUFAC (TOTAL ACRE FEFT) SONOMA SONOMA 20 FOOD AND KINDRED 23 APPAREL + OTHER P 24 LUMBER + WOUD PRC 25 FURNITURE + FIXTU 27 PRINTING, PUBLISH 28 CHEMICAL + ALLIED 30 RUBBER + MISC. PL 31 LEATHER + LEATHER 32 STONE CLAY + GLAS 33 PRIMARY METAL IND 34 FABRICATED METAL	County and Standard Industrial Classification	Number of Employees	on love s	
	Morar Industry Group	-	200	Water Use
	Long tenone inform	l atai	Keparted	
	SOLANU (CONTINUED)			
	MACHINERY.EXCEPT ELECTRICAL	044		1,567,409
	ELECTRICAL MACHNRY, EQPMNT + SUPPLIES	37		85+638
	ATION EQUIPMENT	34		119,894
	SCIENTIFIC INSTRUMENTS ETC.	55	50	275,000
	MISC. MANUFACTURING INDUSTRIES	2		3,926
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEFT)	2,163	1,052	35,502,305 815
	IMA			
	FOOD AND KINDRED PRODUCTS	1,888	1,043	76,590,615
	MILL PRODUCTS	56		246,075
	+ OTHER PRODUCTS ETC.	89	9	101,852
	WOOD PRODUCTS EXCEPT FURNITURE	2,368	1,071	210,025,408
	+ FIXTURES	43	10	277,539
	PRINTING, PUBLISHING + ALLIED INDUSTRIES	337	140	771,191
	+ ALLIED PRODUCTS	32	6	3,901,190
	MISC. PLASTICS PRODUCTS	10		84+366
	+ LEATHER PRODUCTS	129		64.732
	STONE CLAY + GLASS PRODUCTS	52	7	044.69
	PRIMARY METAL INDUSTRIES	30		202,871
	FABRICATED METAL PRDDUCTS.EXCPT.ORDN.ETC	239	10	1,969,287
35 MACHINERY	MACHINERY. EXCEPT ELECTRICAL	146	68	211,926
36 ELECTRICA	ELECTRICAL MACHNRY. EUPMNT + SUPPLIES	1		1,953
37 TRANSPORT	TRANSPORTATION EQUIPMENT	18		116,219
38 SCIENTIFI	SCIENTIFIC INSTRUMENTS ETC.	86		164,098
39 MISC. MAN	MISC. MANUFACTURING INDUSTRIES	69		1,336,113
TOTAL ALL	TOTAL ALL MANUFACTURES	5,562	2,358	296,762,875

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

	(1201) (1201)				
S.I.C.	County and S	Number of Employees	mployees	Woter Use	
Code	Major Industry Group	Total	Reported		_
	STANISLAUS				
19	DRDNANCE AND ACCESSORIES	32		62,016	
20	FOOD AND KINDRED PRODUCTS	6,196	3,476	669,543,482	
23	APPAREL + OTHER PRODUCTS ETC.	1		1.540	
54	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	156	09	17.517.295	
25	FURNITURE + FIXTURES	37		83,855	
56	PAPER + ALLIED PROUUCTS	568		18.166.941	
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	361	184	100.501.075	
28	CHEMICAL + ALLIED PRODUCTS	324	7.7	64,815,710	
29	PETROLEUM REFINING + RELATED INDUSTRIES	9		573,869	
32	STONE CLAY + GLASS PRODUCTS	546	1.2	2,000,034	
33	PRIMARY METAL INDUSTRIES	80		96.853	
34	FABRICATED METAL PRODUCTS. EXCPT. ORDN. ETC	262	220	4.006.087	
35	MACHINERY. EXCEPT ELECTRICAL	177	51	707,704	
36	ELECTRICAL MACHNRY . LUPMNT + SUPPLIES	26		250,597	
37	TRANSPORTATION EQUIPMENT	5.5	0 4	46.937	
38	SCIENTIFIC INSTRUMENTS ETC.	15.		795.77	
39	MISC. MANUFACTURING INDUSTRIES	2.1		59,572	
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	8,918	4.070	878.478.129	
	SUTTER				
20	FOOD AND KINDRED PRODUCTS	426	1,207	14.414.704	
24	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	121		17.870.900	
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ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

23 11 116.8866 23 11 1.457.372 32 30 506.884 21 54 1.248 34.492.696 1.564 115.123 240 145 5.385.306 1.564 10.248 34.492.696 257.786.519 2 2 2 2 4.418 2 2.272 479 353.721.139 4 4 44.893 4 44.72 2 2.272 479 353.721.139
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ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

(			-		l
ز.	County and Standard Industrial Classification	Number of Employees	mployees	Water Use	
Code	Major Industry Group	Totol	Reported		7
	TRINITY (CONTINUED)				_
35	MACHINERY. EXCEPT ELECTRICAL	1		3.025	
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	845	317	151,649,279	
	TULARE				
20	FOOD AND KINDRED PRODUCTS	1,460	1.127	69.810.774	
22	TEXTILE MILL PRODUCTS	14	25	123,203	
23	APPAREL + OTHER PRODUCTS ETC.	179		161.743	
24	LUMBER + WOOD PRODUCTS EXCEPT FURNITURE	431	397	12.173.212	
25	FURNITURE + FIXTURES	20		45,633	
27	PRINTING, PUBLISHING + ALLIED INDUSTRIES	288	83	1,025,379	
28	CHEMICAL + ALLIED PRODUCTS	7	9	102,931	
62	PETROLEUM REFINING + RELATED INDUSTRIES	13		2.316.139	
32	STONE CLAY + GLASS PRODUCTS	171	56	44.489.968	
33	PRIMARY METAL INDUSTRIES	139	14	1,263,072	
34	FABRICATED METAL PRODUCTS. EXCPT. ORDN. ETC	76		470.000	
35	MACHINERY. EXCEPT ELECTRICAL	104		312,437	
36	ELECTRICAL MACHNRY, EQPMNT + SUPPLIES	432	61	5.067,102	
37	TRANSPORTATION EQUIPMENT	85		151,557	
38	SCIENTIFIC INSTRUMENTS ETC.	99	09	36,249	
39	MISC. MANUFACTURING INDUSTRIES	12		197.057	
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	3,515	1,829	137,746,456	
	TUOLUMNE				
20	FOOD AND KINDRED PRODUCTS	9	7	232,870	
54	LUMBER + #OOD PRODUCTS EXCEPT FURNITURE	1,151	1,902	44.867.209	BLE 6
					_

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

TABLE 6

9,863 51,370,859 1,179 177,770 17,744,413 26,313,338 373,190 32,077,168 18,078,556 912,654 941,716 136,718 6,149,274 74,288,263 10,163 6.300 9.862.597 1,427,212 1,216,206 34,800 4,355 5,861,352 262,847 83,621 189,697,241 Water Use 187 117 13 334 27 1,678 38 1,906 901 55 Reported Number of Employees 1,185 28 142 317 210 266 290 7,057 84 121 247 101 467 351 3,173 1,280 Total County and Standord Industrial Clossification Major Industry Group PRINTING, PUBLISHING + ALLIED INDUSTRIES PRINTING. PUBLISHING + ALLIED INDUSTRIES FABRICATED METAL PRODUCTS, EXCPT, ORDN. ETC LUMBER + WOOD PRODUCTS EXCEPT FURNITURE PETROLEUM REFINING + RELATED INDUSTRIES ELECTRICAL MACHNRY, EOPMNT + SUPPLIES MISC. MANUFACTURING INDUSTRIES APPAREL + OTHER PRODUCTS ETC. STONE CLAY + GLASS PRODUCTS STONE CLAY + GLASS PRODUCTS SCIENTIFIC INSTRUMENTS ETC. MACHINERY, EXCEPT ELECTRICAL MACHINERY, EXCEPT ELECTRICAL CHEMICAL + ALLIED PRODUCTS LEATHER + LEATHER PRODUCTS FOOD AND KINDRED PRODUCTS TUOLUMNE (CONTINUED) PRIMARY METAL INDUSTRIES ORDNANCE AND ACCESSORIES TRANSPORTATION EQUIPMENT PAPER + ALLIED PRODUCTS TOTAL ALL MANUFACTURES (TOTAL ACRE FEFT) TOTAL ALL MANUFACTURES (TOTAL ACRE FEET) FURNITURE + FIXTURES VENTURA S.I.C. 31 20 36 38 27 23 54 25 56 27 28 35 37 39 32 33 35 19 29 34

TABLE 6

1,373,160 585 20,403,286 4.010 282,613,616 255,278,374 459,886 50,450 1,141,329 575,488 1,425,316 1,364,281 321,374 204,564 12,098 6,488 4,422,137 18,986,551 35,642 648,605 19,858 400,832 25,491,388 847,252 130,511 Water Use 20 12 6 4 06 3.8 128 1,658 21 1,704 Reported Number of Employees 98 26 9 7 107 14 30 80 84 80 58 2 8 1 523 72 2 15 S 90 10 198 1,493 2,059 Total County and Standord Industrial Clossification PRINTING, PUBLISHING + ALLIED INDUSTRIES PRINTING, PUBLISHING + ALLIED INDUSTRIES FABRICATED METAL PRODUCTS, EXCPT. DRDN. ETC LUMBER + WOUD PRUDUCTS EXCEPT FURNITURE LUMBER + WOOD PRODUCTS EXCEPT FURNITURE PETROLEUM REFINING + RELATED INDUSTRIES Majar Industry Group MISC. MANUFACTURING INDUSTRIES MISC. MANUFACTURING INDUSTRIES STONE CLAY + GLASS PRODUCTS STONE CLAY + GLASS PRODUCTS SCIENTIFIC INSTRUMENTS ETC. MACHINERY, EXCEPT ELECTRICAL MACHINERY, EXCEPT ELECTRICAL CHEMICAL + ALLIED PRODUCTS CHEMICAL + ALLIED PRODUCTS FOOD AND KINDRED PRODUCTS FOOD AND KINDRED PRODUCTS TRANSPORTATION EQUIPMENT TRANSPORTATION EQUIPMENT PAPER + ALLIED PRODUCTS TOTAL ALL MANUFACTURES (TOTAL ACRE FEET) TOTAL ALL MANUFACTURES (TOTAL ACRE FEET) FURNITURE + FIXTURES YUBA 24 29 37 S.I.C. Code 20 25 35 38 39 54 27 28 28 37 20 26 27 32 34 32 35 39

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959

(CUBIC FEET)

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959

(CUBIC FEET

TABLE 6 655,908,805 1,780,520 41,683,794 2,881,455 149,377,360 192,301,895 17,732,548 2,763,619 70,574,475 89,639,468 19,918,559 35,645 4,233 7,752,442 6,608,591 7,409,182 183,207,241 29,814,971 1,293,217 38,735,896 1,552,693,473 33,305,207 Water Use 1,710 1,745 2,967 759 136 2,833 3,936 7,022 1,116 322 264 59 1,782 158 198 288 55 40,249 11,311 3,588 Reported Number of Employees 178 1,175 3,122 4,301 4 , 760 1,178 206 8,786 8,217 2,273 7,212 743 1,406 16,718 551 1,654 3,251 852 4,676 71,261 Total County and Standord Industrial Classification Major Industry Group FABRICATED METAL PRODUCTS. EXCPT. ORDN. ETC PRINTING, PUBLISHING + ALLIED INDUSTRIES LUMBER + WOOD PRODUCTS EXCEPT FURNITURE PETROLEUM REFINING + RELATED INDUSTRIES ELECTRICAL MACHNRY, EUPMNT + SUPPLIES RUBBER + MISC. PLASTICS PRODUCTS MISC. MANUFACTURING INDUSTRIES APPAREL + OTHER PRODUCTS ETC. STONE CLAY + GLASS PRODUCTS SCIENTIFIC INSTRUMENTS ETC. MACHINERY . EXCEPT ELECTRICAL CHEMICAL + ALLIED PRODUCTS LEATHER + LEATHER PRODUCTS FOOD AND KINDRED PRODUCTS ORDNANCE AND ACCESSORIES PRIMARY METAL INDUSTRIES TRANSPORTATION EUUIPMENT PAPER + ALLIED PRODUCTS TOTAL ALL MANUFACTURES (TOTAL ACRE FEET) TEXTILE MILL PRODUCTS FURNITURE + FIXTURES ALAMEDA S.I.C. Code 23 19 20 27 31 35 54 34 38 22 26 28 59 30 39 25 32 33 36 37

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ED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY OR		
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	(1007, 1007)			
S.I.C.	County and S	Number of Emplayees	nplayees	Woter Use
Code	Major Industry Group	Tatal	Reported	
	LOS ANGELFS			
19	ORDNANCE AND ACCESSORIES	17,006	5,129	29,382,837
20	FOOD AND AIMDRED PRODUCTS	51,182	20,465	1,414,686,465
2.1	TOBACCO MANULACTURES	38		
22	TEXTILE MILL PRODUCTS	3 • 744	760	32,158,739
23	APPARFL + OTHER PRODUCTS ETC.	43,050	2,726	50.973.457
24	LUMBER + WOUD PRUDUCTS EXCEPT FURNITURE	7,064	1,646	22,475,455
25	FURNITURE + FIXTURES	22,284	3,246	38.578.851
56	PAPER + ALLIED PROJUCIS	12,201	4,846	857.137.072
27	PRINTING. PUBLISHING + ALLIED INDUSTRIES	32,296	7,096	76.663.924
28	CHEMICAL + ALLIED PRODUCTS	20.743	13,114	961.496.598
29	PLIROLEUM REFINING + RELATED INDUSTRIES	17,959	5,739	3,282,255,173
3.0	RUBBLR + MISC. PLASTICS PRODUCTS	19,632	12,399	272,287,168
3.1	LEMIMER + LLAIHLR PRODUCIS	4 + 500	628	6 • 1 3 2 • 0 4 3
3.2	STONE CLAY + GLASS PRODUCTS	18,819	11.150	314.117.542
3,3	PRIMARY METAL INDUSTRIES	23+566	11.511	241,509,756
34	FAURICATED METAL PRODUCTS. EXCPT. ORDN. ETC	57,758	21,267	899.291.172
35	MACHINERY . EXCEPT ELECTRICAL	51,348	18,830	142,285,207
36	ELECTRICAL MACHNAY, EGPMNT + SUPPLIES	89.387	60.981	205.672.411
37	TRANSPORTATION EQUIPMENT	199,717	124,856	712,837,926
3.8	SCIENTIFIC INSTRUMENTS ETC.	17,124	5 .040	53,801,130
39	MISC. MANUFACTURING INDUSTRIES	12,642	4 • 879	117,219,240
	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)	122,060	336+308	9,771,362,586

ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

_	_	TA	BLE 6	5																						 	
	Water Use			46,563	1,671,774,558		3,901.674	7.928.042	13,473,176	7,379,046	94.480.149	19,040,938	78.574.990	721,335,033	491,036	850,974	35,650,591	13,883,739	34,330,444	4,962,997	3,563,863	13,110,034	2,600,854	2,555,386	2,729,934,889		
	ployees	Reported			4 * 9 4 8		342	1,153	371	1,011	418	4,613	783		108	76	109	594	4,144	1,249	299	2,680	113	461	23,458		
A solution of the solution of	Number of E.m	Totol		28	15,682	12	475	006.9	306	2,661	2,159	11,672	1,698	4 + 082	254	331	1,433	1,265	004.9	3+508	1 + 565	3,913	655	1 • 382	66,285		
	County and S	Majar Industry Group	SAN FRANCISCO	ORDNANCE AND ACCESSORIES	FOOD AND KINDRED PRODUCTS	TOBACCO MANUFACTURES	TEXTILE MILL PRODUCTS	APPAREL + UTHER PRODUCTS ETC.	LUMBER + WOUD PRUDUCTS EXCEPT FURNITURE	FURNITURE + FIXTURES	PAPER + ALLIED PRODUCTS	PRINTING, PUBLISHING + ALLIED INDUSTRIES	CHEMICAL + ALLIED PRODUCTS	PETROLEUM AEFINING + RELATED INDUSTRIES	RUBBER + MISC. PLASTICS PRODUCTS	LEATHER + LEATHER PRODUCTS	STONE CLAY + GLASS PRODUCTS	PRIMARY METAL INDUSTRIES	FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC	MACHINERY . EXCEPT ELECTRICAL	ELECTRICAL MACHNAY, EQPMNT + SUPPLIES	TKANSPORTATION EQUIPMENT	SCIENTIFIC INSTRUMENTS ETC.	MISC. MANUFACTURING INDUSTRIES	TOTAL ALL MANUFACTURES (TOTAL ACRE FEET)		
	. :	Code		19	2.0	2 1	22	23	24	25	26	2.7	28	29	30	31	32	33	34	35	36	37	38	39			

TABLE 6

20,837,376 11,824,329 1,438,612 160,043,560 1,720,103 4,512,416 21,794,883 49,160,468 107,484 1,995,919 2,181,356 114,547,089 605,689 814,929,456 9,236 553,718 400,714,057 536,808 8,301,867 3,378,445 39,943,841,263 916,984 666,021 Woter Use 1,879 88 329 117 119 633,564 897 28 149 356 4 17 37 11 77 158 13,287 43,106 60,736 Reported ESTIMATED ANNUAL TOTAL FRESH WATER USE BY COUNTY AND MAJOR INDUSTRY GROUP. 1957 - 1959 (CUBIC FEET) Number of Employees 97 913 512 290 121 80B 807 495 295 1,263 571 2,383 164 363 2,289 44,039 1,264,421 10,752 4+372 70,284 Totol County and Standard Industrial Classification PRINTING. PUBLISHING + ALLIED INDUSTRIES FABRICATED METAL PRODUCTS, EXCPT. ORDN. ETC PETROLEUM REFINING + RELATED INDUSTRIES LUMBER + WOOD PRODUCTS EXCEPT FURNITURE ELECTRICAL MACHNRY, EUPMNT + SUPPLIES Major Industry Group RUBBER + MISC. PLASTICS PRODUCTS (ALL COUNTIES TOTAL ACRE FEET) MISC. MANUFACTURING INDUSTRIES APPAREL + OTHER PRODUCTS LTC. STONE CLAY + GLASS PRODUCTS SCIENTIFIC INSTRUMENTS ETC. MACHINERY, EXCEPT ELECTRICAL LEATHER + LEATHER PRODUCTS CHEMICAL + ALLIED PRODUCTS FOOD AND KINDRED PRODUCTS ORDNANCE AND ACCESSORIES PRIMARY METAL INDUSTRIES TRANSPORTATION EQUIPMENT PAPER + ALLIED PRODUCTS TOTAL ALL MANUFACTURES (TOTAL ACRE FEET) TEXTILE MILL PRODUCTS FURNITURE + FIXTURES SAN DIEGO ALL COUNTIES S.I.C. Code 37 20 30 34 36 38 23 54 25 9 2 31 32 22

### TABLE 7

# ESTIMATED ANNUAL TOTAL FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

S.I.C. Code	Standard Industrial Classification Industry Group	Water Use
192	AMMUNITION, EXCEPT SMALL ARMS	76,299,386
193	TANKS & TANK COMPONENTS	6,209,898
194	SIGHTING & FIRE CONTROL EQUIPMENT	3,950,784
195	SMALL ARMS	253,982
196	SMALL ARMS AMMUNITION	
199	ORDNANCE & ACCESSORIES N.F.C.	116,521
19	ORDNANCE AND ACCESSORIES	86,830,571
201	MEAT PRODUCTS	2,030,586,919
202	DAIRY PRODUCTS	2,085,978,249
203	CANNING & PRESERVING FRUITS ETC.	2,223,686,290
204	GRAIN MILL PRODUCTS	143,753,300
205	BAKERY PRODUCTS	92,711,297
206	SUGAR	1,401,060,166
207	CONFECTIONERY & RELATED PRODUCTS	31,798,557
208	BEVERAGE INDUSTRIES	1,333,812,278
209	MISCELLANEOUS FOOD PREPARATIONS ETC	777,699,441
20	FOOD AND KINDRED PRODUCTS	10,121,086,497
212	CIGARS	
21	TOBACCO MANUFACTURES	
221	BROAD WOVEN FABRICS, COTTON	
222	BROAD WOVEN FABRICS, SYNTHETICS & S	3,809,360
223	BROAD WOVEN FABRICS, WOOL	7,007,833
2 24	NARROW FABRICS & OTHER SMALLWARES	188,896
2 25	KNITTING MILLS	6,239,187
2 26	DYEING & FINISHING TEXTILES EXCEPT	13,019,151

## ESTIMATED ANNUAL TOTAL FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

S.I.C.	(CUBIC FEET) Standard Industrial Classification	Woter Use
Code	Industry Group	noter Ose
2 2 7	FLOOR COVERING MILLS	9,930,102
228	YARN & THREAD MILLS	517,976
229	MISCELLANEOUS TEXTILE GOODS	8,197,318
22	TEXTILE MILL PRODUCTS	48,909,823
231	MENS & BOYS SUITS COATS & OVERCOATS	4,089,696
232	MENS & BOYS FURNISHINGS ETC.	8,689,777
233	WOMENS MISSES & JRS OUTERWEAR	35,603,396
234	WOMENS MISSES ETC . UNDERGARMENTS	2,028,144
235	HATS CAPS & MILLINERY	867,375
236	GIRLS CHILDRENS & INFANTS OUTERWEAR	1,266,239
237	FUR GOODS	41,042
238	MISC. APPAREL & ACCESSORIES	1,822,371
239	MISC. FABRICATED TEXTILE PRODUCTS	12,621,243
23	APPAREL & OTHER PRODUCTS ETC.	67,029,283
241	LOGGING CAMPS & CONTRACTORS	736,760,093
242	SAWMILLS & PLANING MILLS	8 , 282 , 316 , 845
243	MILLWORK VENEER PLYWOOD ETC.	204,469,338
244	WOODEN CONTAINERS	10,583,082
249	MISC. WOOD PRODUCTS	34,016,905
24	LUMBER & WOOD PRODUCTS EXCEPT FU	9,268,146,263
251	HOUSEHOLD FURNITURE	38,579,300
252	OFFICE FURNITURE	3,914,498
253	PUBLIC BUILDING & RELATED FURNITURE	2,620,327
254	PARTITIONS ETC. OFFICE & STORE FIXT	8,118,264
<b>25</b> 9	MISC. FURNITURE & FIXTURES	3,173,191

### ESTIMATED ANNUAL TOTAL FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959

(CUBIC FEET)

S.I.C. Cade	Standard Industrial Classification Industry Group	Water Use
25	FURNITURE & FIXTURES	56,405,580
262	PAPER MILLS EXCEPT BUILDING PAPER M	1,272,394,666
263	PAPERBOARD MILLS	811,358,271
264	CONVERTED PAPER PRODUCTS EXCEPT BOX	234,761,517
265	PAPERBOARD CONTAINERS & BOXES	535,275,593
266	BUILDING PAPER & BUILDING BOARD MIL	313,108,514
26	PAPER & ALLIED PRODUCTS	3,166,898,561
271	NEWSPAPERS PUBLISHING & PRINTING	343,024,616
272	PERIODICALS PUBLISHING & PRINTING	1,996,396
273	BOOKS	2,101,572
274	MISC. PUBLISHING	7,696,885
275	COMMERCIAL PRINTING	40,154,455
276	MANIFOLD BUSINESS FORMS MFG.	4,075,849
277	GREETING CARD MANUFACTURING	1,821,003
278	BOOKBINDING & RELATED INDUSTRIES	4,064,919
279	PRINTING TRADE SERVICE INDUSTRIES	10,764,540
27	PRINTING, PUBLISHING & ALLIED IN	415,700,235
281	INDUSTRIAL INORGANIC & ORGANIC CHEM	3,070,828,064
282	PLASTIC MATERIALS ETC. EXCEPT GLASS	320,674,716
283	DRUGS	36,468,681
284	SOAP, DETERGENTS, COSMETICS ETC.	122,767,120
285	PAINTS , VARNISHES , LACQUERS , ENAMEL	214,657,766
286	GUM & WOOD CHEMICALS	35,580
287	AGRICULTURAL CHEMICALS	225,017,550
289	MISC. CHEMICAL PRODUCTS	152,913,124

### ESTIMATED ANNUAL TOTAL FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959 (CUBIC EEET)

1957 - 1959 (CUBIC FEET)				
S.I.C. Code	Standard Industrial Classification Industry Group	Water Use		
28	CHEMICAL & ALLIED PRODUCTS	4,143,362,601		
291	PETROLEUM REFINING	6,158,792,811		
295	PAVING & ROOFING MATERIALS	241,956,890		
299	MISC. PETROLEUM & COAL PRODUCTS	12,206,735		
29	PETROLEUM REFINING & RELATED IND	6,412,956,436		
301	TIRES & INNER TUBES	145,080,228		
302	RUBBER FOOTWEAR			
303	RECLAIMED RUBBER	2,755,578		
306	FABRICATED RUBBER PRODUCTS N.E.C.	38,730,571		
3 07	MISC PLASTICS PRODUCTS	104+852+369		
30	RUBBER & MISC. PLASTICS PRODUCTS	291,418,746		
311	LEATHER TANNING & FINISHING	17,043,168		
312	INDUSTRIAL LEATHER BELTING & PACKIN			
3 1 3	BOOT & SHOE CUT STOCK & FINDINGS			
314	FOOTWEAR, EXCEPT RUBBER	1,493,512		
315	LEATHER GLOVES & MITTENS	100,535		
316	LUGGAGE	4,110,095		
317	HANDBAGS & OTHER PERSONAL LEATHER G	1,790,997		
319	LEATHER GOODS N.E.C.	266,168		
31	LEATHER & LEATHER PRODUCTS	24,804,475		
321	FLAT GLASS	571,161		
3 22	GLASS & GLASSWARE, PRESSED OR BLOWN	77,588,334		
3 2 3	GLASS PRODUCTS MADE OF PURCHASED GL	5,346,739		
324	HYDRAULIC CEMENT	487,251,070		
3 2 5	STRUCTURAL CLAY PRODUCTS	54,380,814		

## ESTIMATED ANNUAL TOTAL FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959 (CURIC FEET)

(CUBIC FEET)				
S.I.C. Cade	Standard Industrial Classification Industry Group	Water Use		
3 2 6	POTTERY & RELATED PRODUCTS	42,244,940		
3 2 7	CONCRETE GYPSUM & PLASTER PRODUCTS	862,648,527		
3 28	CUT STONE & STONE PRODUCTS	3,377,334		
3 29	ABRASIVES ASBESTOS & MISC MINERAL P	183,944,336		
32	STONE CLAY & GLASS PRODUCTS	1,717,353,255		
331	BLAST FURNACES STEEL WORKS & RLLNG	461,856,489		
3 3 2	IRON & STEEL FOUNDRIES	94,825,845		
3 3 3	PRIMARY SMELTING & REFINING NONFERR	10,861,989		
334	SECONDARY SMELTING & REFINING NONFR	27,296,287		
3 3 5	ROLLING, DRAWING, ETC. NONFERROUS MET	150,402,048		
3 3 6	NONFERROUS FOUNDRIES	28,566,937		
339	MISC. PRIMARY METAL INDUSTRIES	36,092,757		
33	PRIMARY METAL INDUSTRIES	809,902,352		
341	METAL CANS	34,490,906		
342	CUTLERY HAND TOOLS & GEN HARDWARE	69,340,452		
343	HEATING & PLUMBING FIXTURES	50,686,795		
344	FABRICATED STRUCT. METAL PRODUCTS	152,500,244		
3 4 5	SCREW MACHINE PRODUCTS & BOLTS NUTS	73,446,157		
346	METAL STAMPINGS	181,367,246		
347	COATING, ENGRAVING, & ALLIED SERVICE	547,321,484		
348	MISC. FABRICATED WIRE PRODUCTS	21,533,610		
349	MISC. FABRICATED METAL PRODUCTS	29,598,180		
34	FABRICATED METAL PRODUCTS • EXCPT •	1,160,285,074		
351	ENGINES & TURBINES	13,567,601		
352	FARM MACHINERY & EQUIPMENT	6,874,674		

### ESTIMATED ANNUAL TOTAL FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959

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S.I.C. Code	Standard Industrial Classification Industry Group	Water Use
353	CONSTRUCTION, MINING, ETC. EQUIPMENT	38,973,154
35	METALWORKING MACHINERY & EQUIPMENT	15,341,255
355	SPECIAL INDUSTRY MACHINERY	156,399,179
356	GENERAL INDUSTRIAL MACHNRY & EQUIPM	55,214,181
357	OFFICE + CMPUTNG + & ACCNTG MACHINES	30,815,866
358	SERVICE INDUSTRY MACHINES	38,764,619
359	MISC. MACHNRY EXCEPT ELECTRICAL	57,210,393
35	MACHINERY EXCEPT ELECTRICAL	413,160,922
36	ELECTRIC TRNSMSSN & DSTRBTN EQUIPME	40,396,204
362	ELECTRICAL INDUSTRIAL APPARATUS	17,607,138
363	HOUSEHOLD APPLIANCES	82,045,888
364	ELECTRIC LGHTNG & WRNG EQUIPMENT	21,317,093
365	RADIO & TV RECVNG SETS EXCPT COMM.T	18,295,346
366	COMMUNICATION EQUIPMENT	127,991,484
367	ELECTRONIC COMPONENTS & ACCESSORIES	76,406,027
369	MISC.ELEC. MACHNRY, EQPMNT & SUPPLIE	16,499,958
36	ELECTRICAL MACHNRY & EQPMNT & SUPP	400,559,138
371	MOTOR VEHICLES & VEHICLE EQUIPMENT	171,540,924
372	AIRCRAFT & PARTS	830,296,968
373	SHIP & BOAT BUILDING & REPAIRING	38,985,726
374	RAILROAD EQUIPMENT	
375	MOTORCYCLES BICYCLES & PARTS	471,866
379	MISC TRANSPORTATION EQUIPMENT	5,681,113
37	TRANSPORTATION EQUIPMENT	1,046,976,597
381	ENGNRNG, LAB, & SCNTFC & RSRCH INSTRM	15,876,983

## ESTIMATED ANNUAL TOTAL FRESH WATER USE BY INDUSTRY GROUP 1957 - 1959 (CUBIC FEET)

S.I.C.	Standard Industrial Classification Industry Group	Water Use
382	INSTRMNTS, MEASURING, RECORDING, CNTRL	33,529,501
3 8 3	OPTICAL INSTRUMENTS & LENSES	5,852,857
3 84	SURGICAL, MEDICAL INSTUMNTS & SUPPLI	8,110,278
385	OPHTHALMIC GOODS	769,696
3 8 6	PHOTO EQUIPMENT & SUPPLIES	6,623,454
387	WATCHES, CLOCKS, ETC. & PARTS	
38	SCIENTIFIC INSTRUMENTS ETC.	70,762,769
391	JEWELRY SILVERWARE & PLATED WARE	2,192,746
3 9 3	MUSICAL INSTRUMENTS & PARTS	1,910,198
3 94	TOYS, AMUSEMENT, SPORTING & ATHLETIC	13,624,214
3 9 5	PENS, PENCILS, OFFICE & ARTISTS SUPPL	89,628,196
3 96	COSTUME JEWELRY ETC. EXCPT PRECIOUS	5,159,336
3 98	MISC. MANUFACTURING INDUSTRIES	93,441,890
3 9 9	MISC. MANUFACTURING INDUSTRIES	15,335,505
39	MISC. MANUFACTURING INDUSTRIES	221,292,085
		39,943,841,263

WATER USE OF MAJOR INDUSTRY GROUPS IN PRINCIPAL WATER USING COUNTIES - 1957-1959

TABLE 8

# (Millions of Cubic Feet)

						TABLE 8
Percent of County Totals	100 100 100 100 100 100	6 8 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	100 98 92 85	8 8 8	89 74 93 93	86
COUNTY	5282 653 581 533 722 353 8124	1203 778 972 717 466 316 4452	5220 2676 1434 684 10014	412 361	8705 578 9283 695 754 300	34395
Lumber & Wood Products Exc. Furniture	5282 648 566 325 662 662 7573	11 18 109 3 7 7 7 7 155	1 13 42 3 3 59	8 11	22 19 41 41 60 60 5	7904
Primary Metal Industries		- HEE 8	88 14 71 21 194		242 21 263 282 3 3 564	766
Transportation Equipment		25 43 5	4 113 33 33 67	2   2	713 41 754 754 1115 898	1040
Fabricated Metal Products Exc. Ordance, etc.	1 1	21	13 34 90 8 145	1	899 34 933 12 12 952	1120
Stone, Clay and Glass Products	2   2	92 2 2 2 84 92 300	18 36 183 125 362	56 29 85	314 319 244 8 8 126 697	1446 8 <b>4</b>
Paper & Allied Products	201 14 258 473	270 18 1 5 5	1169 94 149 12 1424	4   4	857 50 907 1 1 3	3110
Chemical & Allied Products		8 9 8 9 120	2410 79 192 85 2766		961 86 1047 12 49	3996
Petroleum, re- fining & related Industries	1   1	1 1 32 31 239 239	1355 721 18 3 2097	25	3282 114 3396 7 401 77 3881	6308
Food & Kindred Products	Area 14 4 7 7 43 5 5 7 73	813 670 747 533 110 301	162 1672 1672 656 410 2900	343	1415 208 1623 79 160 52 1914	8705
	Northern Mountainous Area Plumas Siskiyou Shasta Mendocino Humboldt	Central Valley Area San Joaquin Stanislaus Fresno Sacramento Kern Merced	San Francisco Bay Area Contra Costa San Francisco Santa Clara	Central Coastal Area Monterey Santa Barbara	South Cosstal Area Los Angeles Orange Sub Total San Bernardino San Diego Riverside	INDUSTRY TOTALS Percent of Industry Totals



### APPENDIX A

DATA ANALYSIS
PROCEDURES, CHARACTERISTICS,
AND LIMITATIONS

### TABLE OF CONTENTS

	Page
DATA ANALYSIS PROCEDURES	119
Coding	120
Tabulation	121
Phase I	121
" II	122
" III	122
" IV	122
" V	123
" VI	124
GOMB GHADAGMEDTGMTGG AND	
SOME CHARACTERISTICS AND LIMITATIONS IN THE USE	
OF THE DATA	126

#### DATA ANALYSIS PROCEDURES

The survey returns, as received, were edited for completeness and for obvious errors and/or omissions. When necessary, the questionnaires were returned to the manufacturer for additional information and clarification. The data were then coded and transferred to punch cards for machine processing. All data processing was done by machine methods, using I.B.M. 1620 computers and sorting, collating, and tabulating machines. Following is a more detailed description of the individual procedures used.

Employment data covering the three years of the survey was obtained from the Department of Employment and put onto punch cards. This information furnished data on the number of establishments and average employment for the period of the study, for three-digit Standard Industrial Classification groups in each county of the State. Due to a change in the Standard Industrial Classification in the grouping of industries, the 1957 employment date was not comparable to the 1958 and 1959 data and so was not used.

After the preliminary returns were in, it was decided to recontact all firms that had not responded in Major Industry groups that appeared to use large quantities of water. These major groups were food and kindred products; lumber and wood products, except for contract logging; paper and allied products; chemical and allied products; rubber and miscellaneous plastics products; petroleum, refining and related products; stone, clay, and glass products; and primary metal industries. All firms that were listed by the Department of Employment as having more than one establishment were also contacted a second time whenever incomplete returns

had been received. These were generally the larger-sized establishments. This recontacting process extended from September 1960 until July 1961.

There were a number of firms listed that were classified within the manufacturing group even though they had no manufacturing facilities. These firms maintained only warehouses or sales offices in this State. All such known entries were deleted from the master list.

After all cards were key punched, a card listing of data cards and of address cards was prepared. After punching and verifying, the cards were listed and checked manually for errors. The Mailing list was checked against returns to eliminate duplications and erroneous addresses or firm names.

### Coding

Machine processing. The City and Place Code Book of the Division of Highways was used to code cities and counties. The industrial codes for manufacturing plants are those from the Standard Industrial Classification Manual, 1957 edition. For this survey, the plant was assigned an industrial classification code number on the basis of its product. The manual definitions were used. In the case of more than one activity, classification was based on what the plant reported as the principal product and/or the State Department of Employment's designation. The plants were then divided into two lists, namely, those located in the 10 Southern California counties, and those located in the remaining 48 Northern California counties. The plants reporting from the 10 counties in Southern California were coded by ground water basin areas. The plants reporting from the Northern California counties were coded

by hydrographic areas as shown in State Water Resources Board Bulletin No. 2, "Water Utilization and Requirements in California," and by  $7\frac{1}{2}$  minute, U. S. Geological Survey quadrangle location.

### Tabulation

All data processing was done by machine methods, using I.B.M. 1620 computers and sorting, collating, and tabulating machines. Before processing the data through the computer programs, a machine edit of all data cards was made to check internal accuracy. This included such items as whether detailed water use added up to the total shown, fresh water total intake matched intake from sources, discharge did not exceed intake, working days of plant did not exceed 365, square foot of plant water-using area was in excess of 100 square feet, and total water recirculated was in agreement with detail or purpose for which water was recirculated. Error listings were prepared and all necessary corrections made. The data were then processed through the several computer programs as follows:

### Phase I

This program computed the average quantity of water used by various industrial organizations reporting for the three-year period 1957, 1958, and 1959. The water use data were checked for unit of measurement, with measurements in either gallons or cubic feet accepted. Measurements in gallons were automatically converted to cubic feet to facilitate further work. The average annual quantity of water used during the period was determined by summing the yearly amounts used and dividing by the number of years,

out of the three, (1957, 1958, and 1959) that measurements were reported.

### Phase II

This program computed the average annual number of employees and the average annual number of days worked by various industrial organizations for the three-year period, 1957, 1958, and 1959. The input information was of two types: (1) the number of employees during the year, and (2) the number of work days during the year. The average number of employees or the average number of days worked, depending on the item being processed, was calculated by summing the annual quantities and dividing by the number of years, out of the three, that data were reported.

### Phase III

This program checked the various items of area for unit of measurement. When the area was given in acres, the program computed the equivalence in square feet, rounding to the nearest whole number. If the area was given in square feet, the program computed the equivalence in acres. The final results of the program were the output of the area data, both in square feet and in acres.

### Phase IV

This was a multipurpose computational program for determining the following values, using the output from Phases I, II, and III as data:

- 1. Average cubic feet of fresh water used per employeeday for the years 1957, 1958, and 1959 in the individual plant reporting.
- 2. Average cubic feet of fresh water used, per year, by the individual plant, per square foot of water-using area, for the years 1957, 1958, and 1959.
- 3. Average total cubic feet of fresh water used per year per square foot of water-using area, for any major three-digit Standard Industrial Classification grouping of the individual plants, for the period 1957 through 1959.

### Phase V

This program computes a weighted average unit use factor in cubic feet of fresh water used per employee-day, for the years 1957, 1958, and 1959, based on groupings of the individual establishments by (1) the Department of Water Resources three-digit Standard Industrial Classification (S.I.C.), (2) the D.W.R. four-digit S.I.C. (not used for this report), and (3) the Department of Employment three-digit S.I.C. A special table for use in Phase VI was also prepared.

Mathematically, in preparing these computations, the unit values are weighted by the number of employees in a particular establishment. The special table option computes the weighted unit use factor based on the Department of Employment three-digit S.I.C. grouping. This unit value is then adjusted to an annual value by multiplying it by the average number of work days per year for the particular S.I.C. group. These values are stored in a special table form for use in Phase VI.

### Phase VI

The purpose of this program is to adjust the quantities of fresh water reported used in the Department of Water Resources' survey, to estimate the total statewide quantity used. The basic grouping for the computation of this adjustment is the individual Standard Industrial Classification (S.I.C.) group in each county. Within this basic grouping, data are placed into one of four subclasses depending on which data elements are available. Then the method appropriate to the sub-class of data is applied to adjust the reported quantities of fresh water.

Program Phase VI is a single-purpose computational function. The program attempts to compute for each three-digit

Department of Employment S.I.C. group, in each county, the adjusted total annual quantity of fresh water used during the survey period. The data for each S.I.C. group are first accumulated from the Phase IV program output data. Then, depending on the availability of various elements, the computation of the adjusted total quantity is undertaken in the indicated order of preference, consisting of four steps as follows:

- 1. If all elements are present The annual total quantity of fresh water used in the county by this S.I.C. groups of industries, as reported in the Department of Water Resources survey, is adjusted by the ratio of the people employed, as reported by the Department of Employment, in the corresponding group of industries, to the number of people employed in the same grouping as reported in the D.W.R. survey.
  - 2. If no D.W.R. survey report for this S.I.C. group in

this county is available - The annual statewide unit use of water per employee for this S.I.C. group (unit use value as computed on a statewide basis from all data received by the D.W.R. survey by program, Phase V), is multiplied by the number of people employed in this S.I.C. group and county as reported by the Department of Employment.

- 3. If no D.W.R. survey report for the S.I.C. group, either county or statewide is available And since there are no data from the D.W.R. survey, unit water use factors are not available. The program reports the number of people in the particular S.I.C. group and county as recorded by the Department of Employment.
- 4. If no Department of Employment data for the S.I.C. group and county are available The program procedure is to report the data as they appear in the D.W.R. survey, unadjusted.

A subsequent modification of Phase VI was performed as follows: Wherever less than 10 percent of the people employed in a particular S.I.C. group of industries within a county were reported, the annual statewide unit use of water per employee for this S.I.C. group was used and was multiplied by the number of people employeed in this S.I.C. group and county as reported by the Department of Employment. If the number of employees within any county reported in the D.W.R. survey exceeded the number of people employed as reported by the Department of Employment, the procedure was to accept the total water use as recorded by the Department of Water Resources' survey, unadjusted.

Because the Standard Industrial Classification groups industries only according to each major activity which, in the case of manufacturing, is determined by the product or group of products manufactured, other characteristics such as size of plant, location, processes used, extent of recirculation, quality of water available, and many other variables which may normally have a bearing on the rates of water used, are not considered or in any way evaluated.

The measure of unit value of water use based on employees was developed primarily for extrapolating the survey data collected during the period of the survey to the total statewide requirement. Its use in projecting future industrial water requirements could be subject to considerable variation. The variables mentioned earlier and the accelerated degree of automation may account for the wide range in unit values evident in some cases. Intensive automation during the past decade has tended to maintain or decrease the number of employees per unit of production. Undoubtedly, each of the other variables is subject to continual change which, in turn, will modify water use. Depending upon the use of water by industry, future automation and other variables may further change unit values of water use per employee, thus limiting these data for projection purposes.

Several problems arise when comparing the employment data collected in the survey with employment data from the Department of Employment. The two sets of data are not strictly

comparable. One of the reasons the data are not comparable is a basic difference in reporting units. This water-use survey reporting unit was an individual manufacturing plant consisting of one or more buildings at a single location, while the Department of Employment reporting unit was a tax reporting entity. perhaps 90% of the cases this tax reporting entity was an individual manufacturing plant, and presented no problems of comparability. In the remaining 10% of the plants a number of unique situations occurred, making an overall evaluation of the new effect on the data comparability somewhat difficult. case where some branch plants were concerned, the total employment was assigned by the Department of Employment to the county in which the central office was located. As a result, employees associated with establishments having more than one plant were often not counted in the county in which they were actually engaged (providing two or more counties were involved); instead, they were added to the county in which the establishment was headquartered. Employees were therefore not completely counted in counties with branch plants and were "over-counted" in the headquarter counties.

A second reason for lack of complete comparability is the difference in computational methods used to arrive at a number of employees for any given three-digit industrial group. The employment data for reporting plants in the survey are based on annual employment data for individual plants, averaged for the years reported, while the Department of Employment data are based on monthly employment for any given three-digit Standard Industrial Classification group, averaged for 1958 and 1959.

For these reasons it appears in certain instances that the survey data on "Employees reported" lists a larger number of employees than are shown as "Total employees" for a given three-digit group or county. Examples of this disproportionate allocation are evident in Amador, Lake, Sutter, and Tuolumne counties. Where this occurred, the reported value was substituted in lieu of the extrapolated calculated figure.

APPENDIX B
SURVEY FORMS

### TABLE OF CONTENTS

	Page
Sample of Questionnaire	131
Letter of Transmittal to Manufacturers	133

EDMUND G. BROWN Governor WILLIAM E. WARNE Director

# STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES P. O. 8ax 388 Sacramenta 2, California

Bax 388

2 2, California



### INDUSTRIAL WATER USE SURVEY

Date	Fo	orm Cample	ted:																						
		Campan	y Cavered b	y Thi	s Repo	art:									IN	d	nd r bys.	eturn	to ore	dep	part nple	ment	thi:	is form thin 30 s form	
		Address:														Re ur ch	part nits al arge ars	the to water and a	otal g r (fre estim 1958	galla sh ar ated s, an	ns, o nd b l tata nd 1	ubic rackis ol use 959.	feet, h) int far t Estim	or other lake, dis- he entire ates are lat avail-	
Desc	rip	tion of Prod	luct(s)				-									PI		repoi		ata	sep	arate	ly fo	ar each	
_																									
	_		-				FO	R D	EPAR	TA	WEN.	TAL L	JSE O	NLY						_					
Coonty		City	City Sub- Division			Industr	Ţ			Qui		Т	Hydro- graphic				ect or		Y	ear	S	erlal	Dist.	Additional Identification	
	Ì					П		$\top$							T	1			1	Т		Т		TOTALLING	
						<u>                                     </u>		<u></u>												_	<u></u>				
NUMBER						TEM								eck ar Illans		Cu	bic ft	. 🗆				(s <sub>1</sub>	ecify)		
													1957 F					FOR TI	HE YE	AR C	DF:		1959		
Hem 1		WATER INTA	KE FOR:				,	fresh																	
	Ľ	A. Cooling  1. fresh  2. brockish (solt)																							
		B. Processing (entering into ar contacting 1. fresh products manufactured) 2. headsich															-				_				
	-	product manufactured)  2. brackish  C. Boiler feed fresh											-		_		+				+				
	1	). Sonitary, ai	r-canditianing a	nd mi	sc.		<u>1</u>	fresh					1												
	-	Total intake	for all purpose:					brock fresh		_			-				+								
	ľ	. Total Intake	Tar on porpose	a.			_	brack																	
Item []	-1	FRESN WATER INTAKE FROM:												8				*							
		A. Public water system: municipal private = = = = = = = = = = = = = = = = = = =																				*****			
	(	(name)  C. Is your water supply developed by your campony? Yes no partially																		-					
	1	D. If water is company developed and flow is metered, report quantity used and source																			i				
		deep wel	II streon	n 🗆	othe			[speci	ify)																
	Ε	E. If water is campany developed and flow is not metered but electric power for pro- ducing water is metered separately, camplete the following:																							
	ı	1. Power consumption for water system 1957 1958 1959																							
			awatt-haurs)			1	]																		
		2 Pump testkilowatt-hours pergallans 3. Source: deep wellstreamather															, in the second		^	,					
	L	(Use space under "REMARKS"—ITEM XIII to report additional pumps—DO NOT INCLUDE BOOSTER PUMPS)																···	****ponanci	reconstra				244	
Hom III	_		) should equal										-				+								
		WATER DISCNARGED AND NAME OF FACILITY:  A. Sewer-system (quontity)												,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			_								
	ŀ	(name of sys								_							-	-						······································	
	١	8. Local Water Caurse (quantity) (name of water caurse)																							
	_		inta graund (qu	ontity!	)																-				
	-	Other (quar (specify kin																			-				
	E	E. If disposal is B, C or D, give general laration of discharge point under												*****					-						
Item IV	4-		" ITEM XIII														-				+			******	
17				uloted	or re-v	sed? y	es 🗆	no [																	
	8. If water is recirculated ar re-used, indicate the cooling																								
	amount by kind of use pracessing bailer feed										-				-				+						
									nisc.	220															
							co	mbine	d total																

\* A private water system can be a commercial or mutual water company or a district which supplies water

(See other side)

					1		1000
NUMBER	ITEM		-	1957	195	•	1959
Item Y	WATER TREATED: (include only fresh water)						
	A. Intake water (reported in ITEM IE-1) treated prior to use	(quantity)					
			1				
	B. Waste water (reported in ITEM III) treated for discharge (	quantity)	-				
	C. If discharge is treated, list treatment facilities used under	"Remarks," ITEM XIII					
			100				
	D. Was it necessary to treat water (reported in ITEM IV) prior	to re-use?					**************************************
						3 x 3 3 3 3 3	
	yes na If answer is yes, indicate treatment facilities used under	"Remarks." ITEM XIII	100				
Hem VI	Please indicate by checks in the appropriate bax	es, the primary basis to	r 11gures				
	ITEM	METER RECORDS		ENGINEE ESTIMA			OTHER pecify)
		RECORUS		ESTIMA		- 13	pecity/
			- 1				
	Fresh water intake (ITEM I)		_				
						1	
	Fresh water intake (ITEM II)						
	Fresh water discharge (ITEM III)						
	Fresh water recirculation (ITEM IV)						
						1	
	Fresh water treated (ITEM V)						
				1957		1958	1959
Hom VII	EMPLOYEES:						
	Average annual employment (if employment is highly se	asanal indicate emplaymen	t by the				
	manth, far each year. Use space in "Remarks," ITEM XIII, i	it necessary.)					
14 - WIII		<del></del>					
Hem VIII	AREA:	4.1					ocres   sq. ft.
	A. Indicate entire area of PROPERTY at this location. (Use	acres or sq. ff.):					(check one)
							acres 🔲
	B. Indicate actual water using plant area:						sq. ft. 🗆
							(check one)
Hom IX	VEDETATED AREAS:						
	Estimated vegetated area in and about plant graunds (lawn	s, shrubbery, and flower bea	ds which a	re watered)			square ft.
			1	957	195B	1959	
Item X	UNIT VALUES OF WATER USE:						gollons
	A. Quantity of water used related to quantity of PRODUC						gonons
	Example: 1,500,000 gallans = 1,500 gallan	s per					unit
	Example: 1,000 tons of steel 1 ton of ste	•el					""
			1	957	1958	1959	
	B. Gallans of water used per DOLLAR value added by me						
		allons per added (gross)				1	gallam
	Nate: If two ar more products are invalved, please ind	-	under A c	and B			_
	C. For conneries and other Industries processing or manu	featuring true or more item	a identify	under "Pemark	" ITEM YILL ON	total fresh water	use associated with
	each product and the period of use; for example:	racturing two ar mate trem	is identity	Onder Remark	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		peaches — 1,000,000 g					
	Tatal water intake: 1,500,000 gallans	pears — 500,000 g				1	
Hom XI	WORKING DAYS OF PLANT		<u> </u>	1957	1958	1959	days
						1	- 1 00/1
Hom XII	FUTURE WATER USE:						
	What do you expect your unit value (based an product) of s	water use to be in the farese	eable				
	future, expressed as a percentage of the present unit re-		%				
	(See Item XA)	<u> </u>					
Itom XIII	REMARKS (Please add any information that will help us	evaluate water use by you	campon	1)			

-132-



## Bepartment of Water Resources

SACRAMENTO

January 22, 1960

Gentlemen:

The following request is being made of hundreds of industrial plants such as yours. We earnestly solicit your indulgence in accepting this informal contact and we hope that you will treat this request as one directed to you in lieu of an original letter of transmittal.

The information on industrial water use requested in the enclosed questionnaire is urgently needed by this Department in carrying out the provisions of the California Water Development Program. Your cooperation is eagerly sought in completing the questionnaire and returning it to this office.

The data furnished by you will be used only for statistical purposes and any published documents will contain only collective information in which your individual plant statistics will have lost identity. In addition, only authorized employees of the Department will be permitted to review the completed reports submitted by you.

We realize that this questionnaire asks for information which may not be readily available or which does not necessarily apply to your type of operation. However, the maximum amount of information that you are able to furnish will be appreciated.

Thank you for your time and consideration given to this matter.

Very truly yours,

HARVEY O. BANKS, Director of Water Resources

William L. Berry, Chief Division of Resources Planning



APPENDIX C
BIBLIOGRAPHY

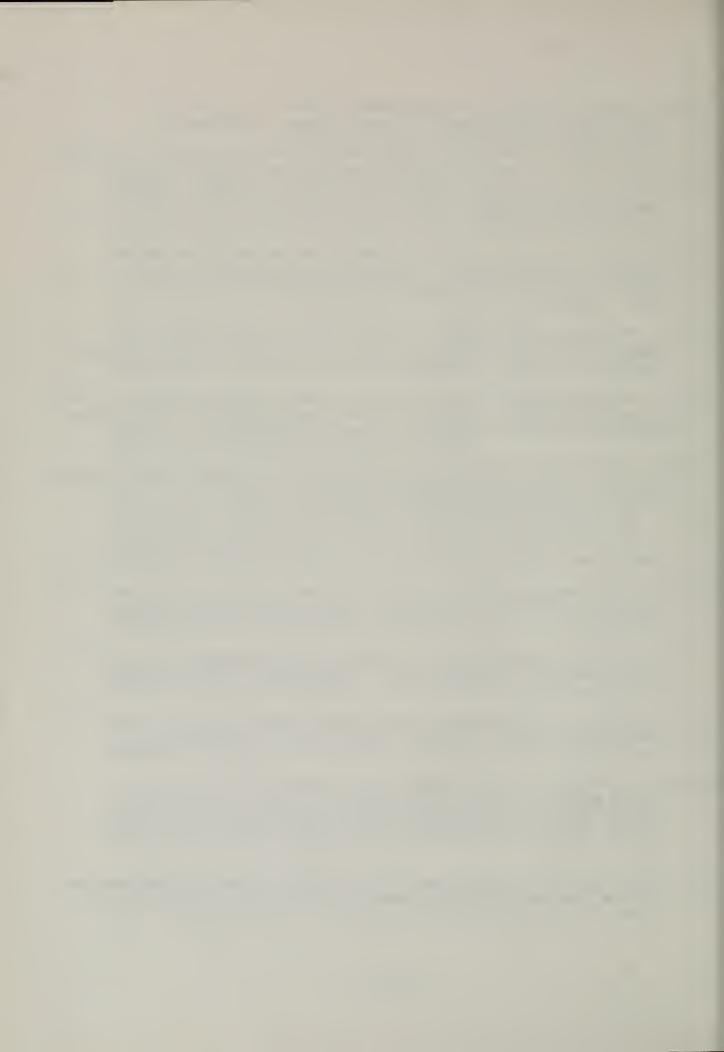
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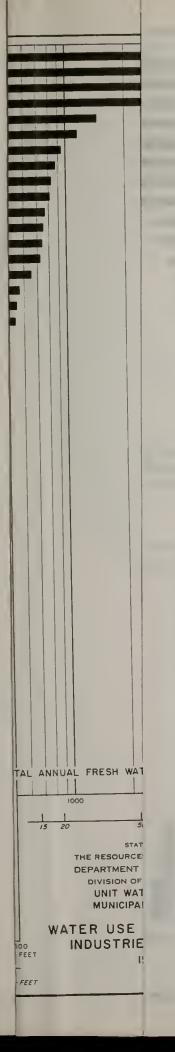
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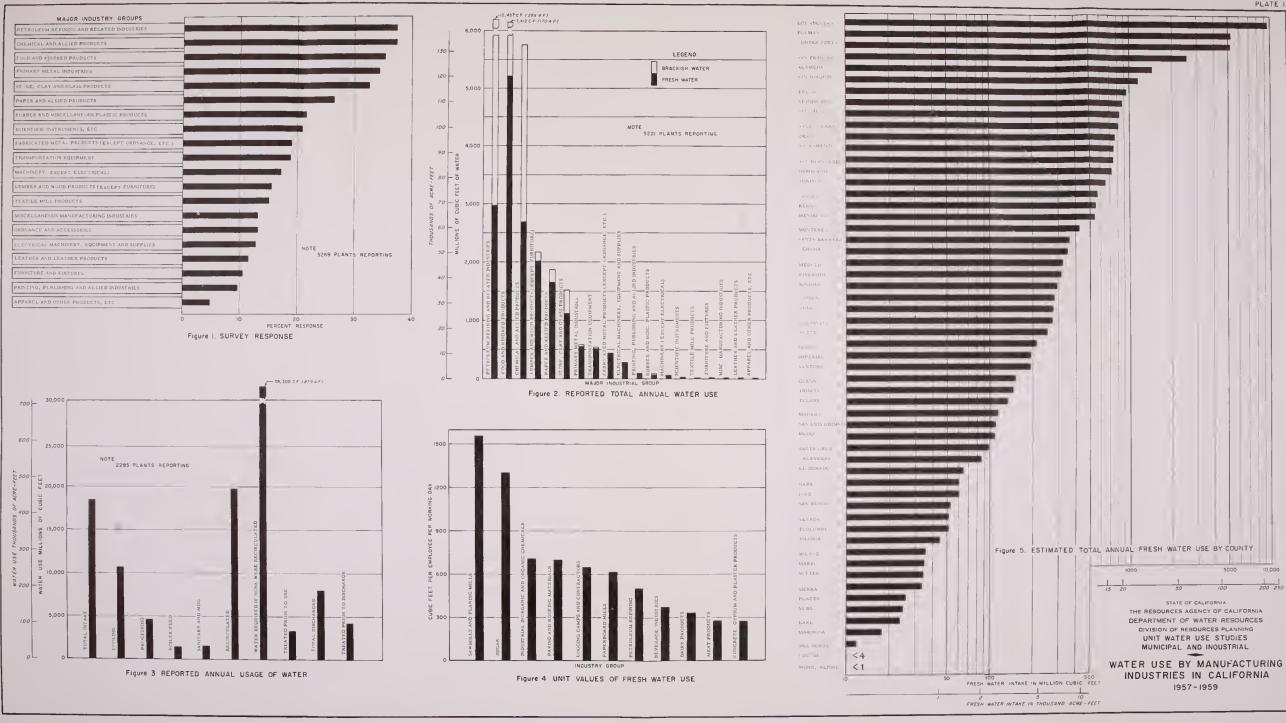




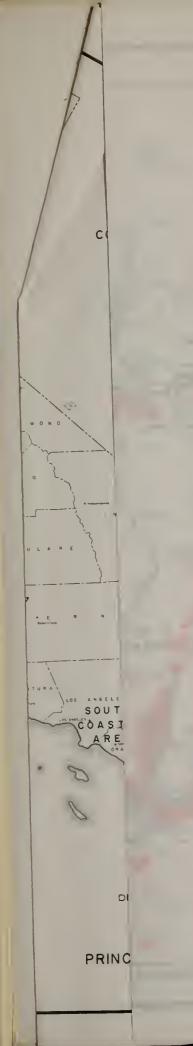




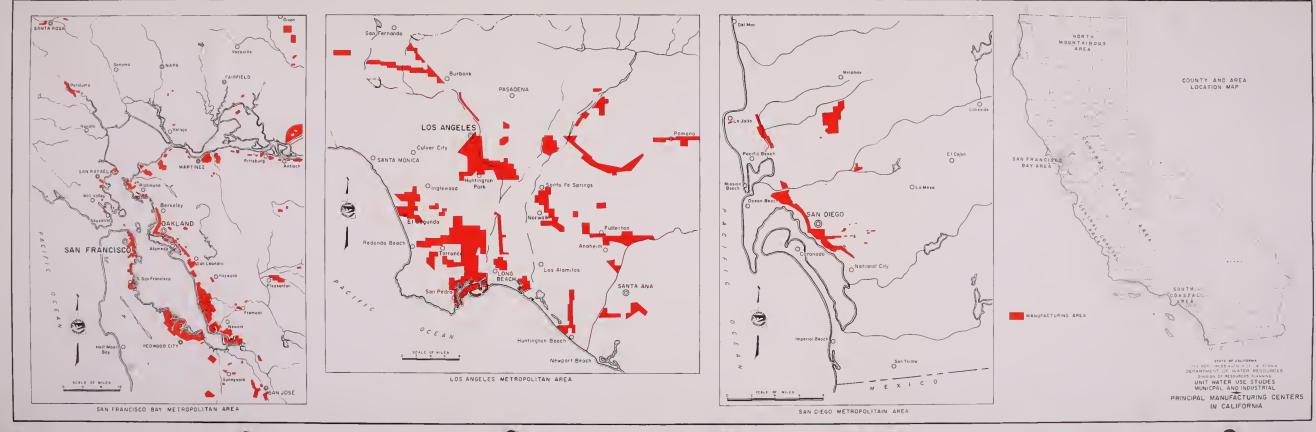
























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